

BEFORE THE
COPYRIGHT ROYALTY TRIBUNAL
WASHINGTON, D.C.

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:
In the Matter of
:
1989 CABLE COPYRIGHT ROYALTY
:
DISTRIBUTION PROCEEDING : DOCKET NO. CRT 91-2-89CD
:
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(This volume contains pages 692 through 791)

Washington, D.C.

Friday, September 20, 1991

The above-entitled matter came on for hearing,
pursuant to adjournment, in the Offices of the Copyright
Royalty Tribunal, in Room 921, 1825 Connecticut Avenue,
N.W., Washington, D.C., at 10:00 a.m.

BEFORE:

MARIO F. AGUERO	Chairman
J.C. ARGETSINGER	Commissioner
CINDY DAUB	Commissioner
ROBERT CASSLER	General Counsel

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ORIGINAL

APPEARANCES:PROGRAM SUPPLIERS:On behalf of MPAA:

ARTHUR SCHEINER, ESQUIRE
DENNIS LANE, ESQUIRE
Holland & Knight
388 17th Street, N.W., Suite 900
Washington, D.C. 20006
(202) 955-5550

MUSIC CLAIMANTS:On behalf of ASCAP:

I. FRED KOENIGSBERG, ESQUIRE
White & Case
1155 Avenue of the Americas
New York, New York 10036-2787
(212) 819-8200

BERNARD KORMAN, ESQUIRE
BENNETT M. LINCOFF, ESQUIRE
ASCAP
One Lincoln Plaza
New York, New York 10023
(212) 621-6270

On behalf of BMI:

CHARLES T. DUNCAN, ESQUIRE
MICHAEL FABER, ESQUIRE
JOSEPH J. DIMONA, ESQUIRE
Reid & Priest
Market Square
701 Pennsylvania Avenue, N.W.
Washington, D.C. 20004
(202) 508-4081

EDWARD W. CHAPIN, ESQUIRE
General Counsel
Broadcast Music, Inc.

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APPEARANCES: (Continued)On behalf of SESAC:

LAURIE HUGHES, ESQUIRE
SESAC, Inc.
55 Music Square East
Nashville, Tennessee 37203
(615) 320-0055

On behalf of National Association of Broadcasters:

JOHN I. STEWART, JR., ESQUIRE
WILLIAM D. WALLACE, ESQUIRE
LORI V. BATTISTONI, ESQUIRE
Crowell & Moring
1001 Pennsylvania Avenue, N.W.
Washington, D.C. 20004-2505
(202) 624-2500

On behalf of Joint Sports Claimants:

ROBERT A. GARRETT, ESQUIRE
TERRI SOUTHWICK, ESQUIRE
Arnold & Porter
1200 New Hampshire Avenue, N.W.
Washington, D.C. 20036
(202) 872-6700

PHILIP R. HOCHBERG, ESQUIRE
Baraff, Koerner, Olender & Hochberg
5335 Wisconsin Avenue, N.W., Suite 300
Washington, D.C. 20015-2003
(202) 686-3200

On behalf of Public Television Claimants:

THOMAS P. OLSON, ESQUIRE
Randolph D. Moss, Esquire
Wilmer, Cutler & Pickering
2445 M Street, N.W.
Washington, D.C. 20037-1420
(202) 663-6651

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APPEARANCES: (Continued)On behalf of Devotional Claimants:

JOHN H. MIDLEN, JR., ESQUIRE
GREGORY H. GUILLOT, ESQUIRE
Midlen & Guillot, Chartered
3238 Prospect Street, N.W.
Washington, D.C. 20007-3214
(202) 333-1500

CLIFFORD HARRINGTON, ESQUIRE
BARRY H. GOTTFRIED, ESQUIRE
Fisher, Wayland, Cooper & Leader
1255 23rd Street, N.W., Suite 800

GEORGE R. GRANGE, II, ESQUIRE
RICHARD M. CAMPANELLI, ESQUIRE
Gammon & Grange
1925 K Street, N.W., Suite 300
Washington, D.C. 20006
(202) 862-2000

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C O N T E N T SWITNESSESEXAMINATIONDIR CROSS REDIR RECROSS TRIB'LProgram Suppliers

Allen R. Cooper (Resumed)

By Mr. Lane	--	--	779	--	--
By Mr. Olson	--	697	--	--	--
By Mr. Campanelli	--	762	--	--	--

E X H I B I T SFORNUMBERIDENTIFICATION RECEIVEDPublic Television

2-X (Excerpt '83 proc)	759	--
3-X (Cons Rpt 9/91)	744	--
4-X (Cons Rpt Cbl Sub Sur '90)	747	--
5-X (Cbl Ntwk P/T Rtg)	747	--
7-X (Cum Dist Sub Incid, Ind Sta)	733	--
8-X (" " " " PTV Sta)	733	--
9-X (Excerpt Levin treatise)	698	--
10-X (PG Bdcst/Cblcast 88)	706	--
12-X (Pg Factbook - 91)	717	--
13-X (Pg Factbook KTMD)	717	--
14-X (Sel Com Sta Inc 89 NSS)	702	--

Devotionals

13-X (Sel Sp Sta w/80,000)	763	--
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P R O C E E D I N G S

(10:00 a.m.)

CHAIRMAN AGUERO: Good morning, everyone. This morning, we have Mr. Olson, representing PBS, as you may know, and his assistant -- the lady's name?

MR. OLSON: Michell Costa.

CHAIRMAN AGUERO: And, of course, Mr. Cooper, as always. Would you like to proceed, Mr. Olson?

MR. OLSON: Thank you very much, Mr. Chairman.
Whereupon,

ALLEN R. COOPER

resumed the witness stand and, having been previously duly sworn, was examined and testified further as follows:

CROSS-EXAMINATION

BY MR. OLSON:

Q Mr. Cooper, you have testified several times over the last few days, about there being two different types of survey samples, is that right?

A That's correct, two different types of selecting samples.

Q Exactly. And the first type is selecting at random, is that correct?

A Yes.

Q And the second type is selecting by use of judgment, is that right?

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1 A That's correct.

2 Q And you recall that last week, I believe, you
3 quoted from a treatise that talked about different methods
4 of sampling, is that right?

5 A Yes, sir.

6 Q And that was the treatise, Statistics for
7 Management, by Mr. Levin, is that correct?

8 A That's correct.

9 Q Because I believe that that treatise was not put
10 in the record at the time you testified, I just wanted to
11 make sure that the version that you referred to was part
12 of the record, and I will -- I have marked that as PTV
13 Exhibit 9-X.

14 (Whereupon, the document was
15 marked for identification as
16 Exhibit No. PTV 9-X)

17 Mr. Cooper, I have taken the liberty of blowing
18 up the paragraph that you read into the record last week
19 because I think there's a lot of wisdom in that.

20 I wonder if you could, just to refresh everyone's
21 recollection, if you could read the two sentences that
22 start on the fourth line of page 275 of PTV Exhibit 9-X.

23 A These are underlined in your exhibit?

24 Q That's correct.

25 A You're asking me to read --

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1 Q The first block of underlined material.

2 A I read from PBS Exhibit 9-X, "In judgment
3 sampling, personal knowledge and opinion are used to
4 identify those items from the population that are to be
5 included in the sample. A sample selected by judgment
6 sampling is based on someone's expertise about the
7 population".

8 Q Now, those sentences are a fair description of
9 how you believe you selected the stations to be included
10 in the 1989 Special Nielsen Study, is that correct?

11 A That is correct, Mr. Olson.

12 Q Now, let's talk about the way you selected the
13 commercial stations that were included in the 1989 study.

14 A Mr. Olson, I'm glad you referenced the fact that
15 my work with respect to selection was limited to the
16 commercial stations.

17 Q Oh, yes, I'm well aware of that.

18 Now, in your testimony on page, you refer to the
19 use of a "single objective criterion", the number of
20 subscribers of Form 3 cable systems who can receive a
21 signal as a distant signal, as being the sole criterion for
22 selecting stations, is that correct?

23 A That was absolutely my intention, Mr. Olson.

24 Q But as we discussed yesterday you, in fact,
25 started out with that as a criterion, but then you applied

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1 your judgment and experience in choosing stations to be
2 included in the study, isn't that correct?

3 A With exceptions based upon my judgment and
4 experience.

5 Q Precisely. For example, I believe that Mr.
6 Stewart talked with you yesterday about a station with the
7 call letters WPCB, do you recall that station?

8 A Yes, very familiar with it.

9 Q And that's a station that had, in 1989,
10 approximately 291,000 distant subscribers, is that correct?

11 A I believe that's true.

12 Q And 291,000, obviously, is far more than the
13 80,000 cutoff that you started out with, is that correct?

14 A That's true.

15 Q But you excluded that statement because you
16 believe that even though it had a lot of distant
17 subscribers, it had only a very small amount of distant
18 viewing, is that correct?

19 A Of any viewing.

20 Q Of any viewing and, thus, necessarily of distant
21 viewing, is that correct?

22 A That's correct.

23 Q And that was a religious broadcasting station,
24 is that correct?

25 A Yes, that's correct.

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1 Q In fact, you have a lot of experience with the
2 most heavily carried TV stations, don't you? You know a
3 lot about those stations?

4 A I've been exposed to the data with respect to
5 distant signal carriage for ten years now.

6 Q Now, I'd like to ask you to turn your attention
7 to an exhibit that was marked by Mr. Stewart yesterday, NAB
8 1989 Exhibit 38-X. You will recall that this exhibit is
9 a reduced copy of the Cable Data Corporation printout that
10 you used in selecting stations.

11 A I recall that exhibit. I don't have a copy of
12 that here.

13 CHAIRMAN AGUERO: Here is a copy.

14 THE WITNESS: Thank you.

15 BY MR. OLSON:

16 Q Mr. Cooper, I wonder if you could just tell the
17 number of stations that you decided not to include in the
18 sample, that had more than 80,000 distant subscribers? I
19 believe that, with one exception, those are the stations
20 that are highlighted in yellow, the exception being WXTV
21 in Paterson, New Jersey.

22 A I don't know precisely what you want me to do.
23 Do you want me to count the ones that are outlined in
24 yellow?

25 Q Right.

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1 A There are 20 outlined in yellow.

2 Q And you also added two stations that had fewer
3 than 80,000 distant subscribers, again, based on your
4 judgment and experience, is that correct?

5 A Based upon the previous data with respect to
6 those stations.

7 Q And your judgment and experience, based on that
8 previous data --

9 A My judgment suggested that the material that we
10 had in June, 1990, with respect to those stations, may not
11 have been complete.

12 Q And those two stations were KRIV in Houston, and
13 WFMD from --

14 A WSVN.

15 Q Pardon me -- WSVN from Miami. Mr. Cooper, just
16 so --

17 A One moment, please. (Perusing document.) I'm
18 looking for the Houston station, which I haven't located
19 yet.

20 I see it now, it's the one in blue.

21 Q I have marked for the record, a document entitled
22 PTV Exhibit 14-X, encaptioned Selection of Commercial
23 Stations to be Included in the 1989 Special Nielsen Study -
24 - An Illustration.

25 (Whereupon, the document was

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1 marked for identification as
2 Exhibit No. PTV 14-X)

3 A Yes, I see that.

4 Q You have a copy of Exhibit 14-X, okay?

5 A Yes.

6 Q Would you just -- will you accept my
7 representation that the numbers of distant subscribers on
8 these stations have been correctly copied from NAB Exhibit
9 38-X, or would you prefer to check them?

10 A I was looking for my copy of 38-X which I had
11 with me earlier. Okay, I have it now.

12 Q Now, 37-X, if I recall, was a list of stations
13 that were excluded from the survey that, based on current
14 data, had more than 80,000 distant subscribers in 1989-1,
15 is that correct?

16 A And NAB 38-X is the printout that you were
17 actually working from at the time you selected stations,
18 is that correct?

19 A That's correct.

20 Q Are you ready, Mr. Cooper?

21 A Yes. I'm sorry, were you waiting for me?

22 Q I'm sorry, I was waiting for you.

23 A No, I have accepted your Exhibit 14-X as taking
24 the same numbers that were on NAB 37-X.

25 Q Now, you will see that the stations listed on 14-

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1 X are all Independent stations, is that correct?

2 A Yes.

3 Q And the station with the largest number of
4 distant subscribers is KSCI, which had about 103,000, is
5 that right?

6 A Yes.

7 Q And that station was not included in the sample,
8 is that correct?

9 A Yes.

10 Q And the station with the second highest on this
11 list is WCIU which had about 101,000, is that right?

12 A That's correct.

13 Q And that was also not included, is that correct?

14 A That's correct.

15 Q The next two stations are KTXH which had about
16 101,000, and WTOG which had about 94,000, and they were
17 both included in the sample, is that correct?

18 A That's correct.

19 Q And the final station, KTMD, had about 93,000,
20 and was not included in the sample?

21 A That's correct.

22 Q Now, Mr. Cooper, the reason that you did not
23 include KSCI and WCIU and KTMD in the sample is that you
24 believed that although they had a relatively large number
25 of subscribers, they would not have substantial distant

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1 viewership, correct?

2 A Both KSCI and KTMD, with respect to measurements
3 by Nielsen in their Station Index report, are both reported
4 in daypart only because they have minimal audience and do
5 not have sufficient audience to be reportable on a program-
6 by-program basis.

7 Q So, you did exclude those stations -- which are
8 the ones you are referring to?

9 A KSCI and KTMD.

10 Q You excluded both of those stations because you
11 believe that they had too small distant audiences to be
12 appropriate for inclusion in your survey?

13 A They would not provide any measurable data.

14 Q And WCIU?

15 A WCIU is one of the stations that I probably
16 should have included, and its omission is an error on my
17 part.

18 Q Mr. Cooper, the three stations on PTV Exhibit 14-
19 X that were not included in the survey, are all Spanish-
20 language stations, isn't that correct?

21 A I don't believe that's true.

22 Q Mr. Cooper, I'm marking for the record, PTV
23 Exhibit 10-X.

24 (Whereupon, the document was
25 marked for identification as

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Exhibit No. PTV 10-X)

Mr. Cooper, I direct your attention to the second page of PTV Exhibit 10-X, which is a page from the Broadcasting/Cablecasting Yearbook 1988. Do you see that that indicates that KSCI is a Spanish-language TV station?

A No, I understand what you are saying. I also had to look at your first page which is from the 1991 edition, which indicates that the station was sold during this time.

Q It indicates that it was sold in 1986, doesn't it, Mr. Cooper?

A It was sold in 1986. Again, I wouldn't debate this. I think that KSCI certainly was not rejected because it was a Spanish-language station. We have included Spanish-language stations. As a matter of fact, one of the things that interesting, when you say about Spanish-language stations, Mr. Olson, is on your Exhibit 10-X, if you look at the line marked Represented Sales, you'll see Asian Television Sales.

It's my understanding that KSCI is a station that broadcasts in multiple languages, that its schedule is divided during the day, to provide programs for various smaller communities around the Los Angeles area, including Chinese, Japanese, Korean, and other groups that are in the Los Angeles area, non English-speaking, generally, audiences, but not -- but not -- restricted to a Spanish

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1 group.

2 Q And a station like that could be of substantial
3 value to a cable operator because it is providing
4 programming that is important to a certain segment of the
5 cable population, isn't that right?

6 A It would depend upon the extent to which the
7 subscribers of that cable system outside of San Bernardino
8 have an interest in it. The station is transmitting into
9 the San Bernardino-Los Angeles area where the station would
10 not be distant. Whether or not there are these different
11 linguistic and ethnic groups outside of San Bernardino is -
12 - I can't tell that. And if I were a cable system located
13 outside this market and had none of these population groups
14 represented, I'd have no interest at all in the station.

15 Q Well, Mr. Cooper, if a cable system serving
16 103,000 distant subscribers chose to carry it, presumably
17 they did so because they thought it would be of interest
18 to their subscribers, isn't that correct?

19 A That's one good reason. Another good reason that
20 they would carry KSCI is that because of its multiple
21 language type of transmissions, it would qualify as a
22 specialty station, and a specialty station could be carried
23 by any cable system exempt from the FCC limitations on the
24 number of distant signals a cable system could carry.

25 Q So, it would not be subject to the 3.75 rate?

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1 A It would not be subject to the 3.75 rate, and it
2 would not affect the 3.75 rate with respect to any other
3 non-specialty stations that that cable system carried.

4 Q But a cable system still would not carry it
5 unless they thought it was of substantial interest to some
6 material portion of their subscribers, would they?

7 A I think that the cable system would carry it
8 because it provided programming that was not otherwise
9 available in their community.

10 Q Even though it didn't have enough viewing to be
11 worth including in your survey?

12 A I think that that would be true.

13 CHAIRMAN AGUERO: Do we have in the record how
14 many hours were in Spanish, how many in Japanese, in
15 Korean, or Chinese, or Indian?

16 THE WITNESS: We could probably develop those
17 data for you from Television Guide magazine, if -- again,
18 there is another "if" involved -- stations which have
19 limited viewing, like KSCI, are often not listed in TV
20 Guide, even the TV Guides for those areas. TV Guide does
21 not list all the stations in a market.

22 CHAIRMAN AGUERO: Is KSCI similar like the one
23 in New York, WNJU, who has Indian programs, Korean, Spanish
24 --

25 THE WITNESS: Yes, I think it's similar to that,

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1 yes.

2 COMMISSIONER ARGETSINGER: Mr. Cooper, you said
3 something I wish you would develop a little bit. The
4 programming on that was not identifiable?

5 THE WITNESS: In anticipation possibly of
6 questions like this, particularly as they related to WPCB,
7 I did something this morning -- and it's not general
8 procedure but, if you wish, I'll tell you what I have done.
9 These are two pages from the Nielsen report, relating to
10 station WPCB in Pennsylvania. And on this listing, the one
11 page of this listing lists all the television stations in
12 the Pittsburgh area and, with respect to WPCB, following
13 the call sign, there is an "L" in the parentheses. I can
14 show this to you. What it means is that "L", this local
15 station is reportable in the daypart section only.

16 CHAIRMAN AGUERO: This is the Greensburg station.

17 THE WITNESS: This is the Greensburg station.
18 I just wanted to explain what the "not reportable on a
19 program basis" meant, and this is the documentation for
20 that.

21 COMMISSIONER ARGETSINGER: What does that mean,
22 that means that Nielsen can't track that?

23 THE WITNESS: It means the audience is too small.
24 The second page of this item that I have done this morning,
25 if for WPCB -- it's for Pittsburgh, again, from the same

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1 report -- and it shows the number of households in the
2 station total area that viewed WPCB between 9:00 a.m. to
3 midnight, and between 7:00 a.m. to 1:00 a.m.

4 Between 9:00 a.m. and midnight, in the station
5 total area, the number of households is one in terms of
6 1,000, which means it could be anything between 501 and
7 1499 households, total. And between 7:00 a.m. and 1:00
8 a.m., the same number appears, again, a one. In contrast,
9 for example, the station KBKA, which is the first one
10 listed, has 139,000 households in the first time period,
11 and 122,000 households in the second time period.

12 the point I am making simply is that WPCB has
13 minimal audience in this total area both with respect to
14 people who receive it on a broadcast basis, direct over-
15 the-air, and also that might receive it via cable. There
16 would be absolutely no showing, no value to anyone, by
17 including that station in the sample.

18 COMMISSIONER ARGETSINGER: But am I mistaken that
19 the programs themselves are identifiable, or would they -
20 -

21 THE WITNESS: Not in the Nielsen report. The
22 Nielsen report indicates lists program-by-program for 20
23 or 30 different dayparts, and it shows the viewing for each
24 of those programs, on each of those stations, during each
25 of those dayparts.

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1 With respect to WPCB, it is listed only in the
2 summary, which is the daypart thing, and there are none of
3 the programs that are broadcast by WPCB -- there is no
4 audience data for any of the programs broadcast by WPCB.

5 COMMISSIONER ARGETSINGER: So, if it had been
6 included, it would have been difficult or impossible for
7 Nielsen to come up with data on it?

8 THE WITNESS: No, they could have developed
9 program data for WPCB possibly from other sources. For
10 example, we subscribe, at MPAA, to a service called TV
11 Data. TV Data provides program schedules to newspapers,
12 particularly, all over the country, and they presumably
13 have schedules from the stations.

14 Also, Nielsen seeks to obtain listings from each
15 of the stations in the designated market areas with respect
16 to -- I think we could have gotten that information, but
17 I think the point is that it would have told us nothing.

18 COMMISSIONER ARGETSINGER: Thank you.

19 BY MR. OLSON:

20 Q Mr. Cooper, since you brought up WPCB, let me
21 just clarify, WPCB was considered valuable enough by cable
22 operators to be carried by Form 3 cable systems reaching
23 291,000 people, is that correct?

24 A That's correct.

25 Q Even though it had viewing so low that you didn't

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1 think you could really measure it, is that correct?

2 A It would be so totally insignificant that the
3 work and cost of developing, of including it in the sample,
4 would have been just money thrown off the window.

5 Q So, it must have been something other than high
6 viewing hours that led cable operators to carry WPCB, would
7 you say that's right?

8 A I think that that's right. WPCB also has the
9 specialty station advantage that I mentioned in connection
10 with KSCI.

11 CHAIRMAN AGUERO: Mr. Cooper, the number of
12 subscribers is 299,000, 300,000 subscribers on WPCB --

13 THE WITNESS: That's correct, sir.

14 CHAIRMAN AGUERO: -- according to NAB Exhibit 37-
15 X?

16 THE WITNESS: That is the number that was
17 computed by Mr. Larson.

18 CHAIRMAN AGUERO: Automatically, a station with
19 80,000 subscribers or more is not included in the Nielsen
20 Survey?

21 THE WITNESS: Oh, no -- you mean what we did?

22 CHAIRMAN AGUERO: Yes.

23 THE WITNESS: In my selection of the station
24 sample, I would have rejected any commercial station with
25 fewer than 80,000 subscribers.

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1 CHAIRMAN AGUERO: And you were aware of the poor
2 viewing hours of WPCB before you decided not to include it
3 in the survey?

4 THE WITNESS: WPCB, Mr. Chairman, has had
5 substantial distant signal subscriber figures all over
6 these years, so I am familiar with the WPCB situation even
7 before we began the 1989 review. And I knew then, even
8 before I looked at what is now designated NAB 38-X, that
9 WPCB really should not be included in the sample because
10 it would be a waste of time and money.

11 CHAIRMAN AGUERO: Waste of time and money.

12 THE WITNESS: Yes, sir.

13 CHAIRMAN AGUERO: Okay. Thank you very much.

14 COMMISSIONER DAUB: May I take up just a few
15 minutes of your time?

16 MR. OLSON: Of course, Commissioner.

17 COMMISSIONER DAUB: Mr. Cooper, is it correct,
18 according to NAB Exhibit 38-X, where the underline is a
19 blue mark, although the 1989 subscriber numbers were below
20 80,000, you have included KRIV in Houston, Texas, for
21 instance, is that correct?

22 THE WITNESS: Yes. If you look at the KRIV
23 figures, Commissioner, and look at the preceding 88-2 and
24 88-1 figures, they are well over 80,000. And it's my
25 assumption again -- I think that the exhibit that Mr. Olson

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1 has just presented, indicates that there is a degree of
2 expertise required in terms of using it in making a
3 judgment sample. And I used my expertise in terms of
4 making the assumption that the figure for KRIV truly would
5 be over 80,000 in 1989.

6 COMMISSIONER DAUB: That was from your experience
7 in previous years that KRIV did attract over 80,000 in
8 previous years, is that correct?

9 THE WITNESS: That's correct.

10 COMMISSIONER DAUB: Did you include in your
11 sample stations, KPLR and WITV?

12 THE WITNESS: I'm sorry?

13 COMMISSIONER DAUB: Those are just a couple
14 stations above KRIV -- that's NAB Exhibit 38-X.

15 THE WITNESS: KPLR has been in our sample in
16 previous years, however, I'm looking at the data for 88-2,
17 and it had already dropped below the 80,000 level.

18 COMMISSIONER DAUB: 88-2 is 93,405.

19 THE WITNESS: Oh, yes -- I was looking at the one
20 below that. You are right, Commissioner. Again, a matter
21 of judgment.

22 COMMISSIONER DAUB: From '86 through '88 second
23 period, both stations seem to have had well over --
24 actually, until '88 first quarter, they were over 100,000.

25 THE WITNESS: Yes, those changes will take place.

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1 One of the big elements, Commissioner, that has occurred
2 during this time, was the emergence of the so-called Fox
3 Network. And a lot of the stations which previously had
4 had no distant carriage, developed distant carriage by
5 virtue of having those programs. And so the figures were
6 in a state of flux at that time.

7 I found that the KPLR figure was -- KPLR was
8 rejected because it did not meet the 80,000 standard. I
9 assumed that that 68,000 was going to be representative of
10 what it would be through 1989.

11 COMMISSIONER DAUB: But you nevertheless included
12 KRIV, which dropped first quarter of '89 to 40,000. That's
13 half of your standard.

14 THE WITNESS: When I see a number dropping that
15 much, Commissioner, I feel quite confident that the 40,000
16 is an incomplete number.

17 BY MR. OLSON:

18 Q Mr. Cooper, let me follow up on Commissioner
19 Daub's point and on the point you just made. Would you
20 turn your attention to the station KPRC, which is four
21 above KRIV on the same page of NAB 38-X that we've been
22 referring to. Do you see that?

23 A Yes.

24 Q Do you see that in 1988-2, it had 105,000
25 viewers?

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1 A Yes.

2 Q And that it dipped down to about 45,000 in 89-1,
3 correct?

4 A Yes.

5 Q Now, it started out in 88-2 with more viewers
6 than KRIV had, is that correct?

7 A Yes.

8 Q And it ended up in 89-1 with more viewers than
9 KRIV had, is that correct?

10 A Slightly more.

11 Q And it had a crop of about 60,000?

12 A Yes.

13 Q The same drop that a moment ago you said would
14 trigger in you the belief that the station should be
15 included because an error had been made, is that correct?

16 A No, I said that -- I didn't say an error had been
17 made, I felt that the data were incomplete at the time that
18 I received them.

19 Q Right, but you did not believe that the data were
20 incomplete about KPRC?

21 A I did not.

22 Q What's the difference between KPRC and KRIV in
23 that respect?

24 A It was a matter -- again, it was a matter of
25 judgment on my part, which could be erroneous, but it was

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1 my best judgment trying to select the sample on a totally
2 objective basis.

3 Q What were the criteria that influenced your
4 judgment?

5 A My part experience and knowledge with respect to
6 these stations and these markets.

7 Q What particular things about KPRC and KRIV led
8 you to distinguish them?

9 A I felt -- I really can't tell you at this time.
10 I must have had a reasoned objective justification for
11 doing that a year and two or three months ago.

12 Q But you can't reconstruct that?

13 A No, I cannot.

14 Q Let me turn back to PTV Exhibit 14-X. I want to
15 mark two related exhibits, which I have premarked as PTV
16 Exhibits 13-X and 12-X.

17 (Whereupon, the document was
18 marked for identification as
19 Exhibits Nos. PTV 13-X and
20 12-X, respectively)

21 Mr. Cooper, direct your attention to PTV Exhibit
22 12-X, do you see that's a page from the Factbook about
23 WCIU-TV?

24 A The 1991 Factbook.

25 Q Right. And you see that at least of the 1991

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1 Factbook, that WCIU was affiliated with Univision?

2 A In 1991, yes.

3 Q Do you have reason to believe that its
4 affiliation changed over the past few years?

5 A Yes, I do.

6 Q What reason do you have?

7 A Just my knowledge of WCIU's operation in the past
8 years.

9 Q And what does that knowledge tell you?

10 A The knowledge tells me that it was not a station
11 that broadcast primarily programs in Spanish.

12 Q What kind of station was that in 1989?

13 A It was an Independent with various types of
14 programming -- it's hard for me to characterize it --
15 probably, again, oriented toward ethnic minorities.

16 Q It was oriented toward ethnic minorities.

17 A That's my opinion.

18 Q Any particular minorities?

19 A Not that I'm aware of, but I do know it was not,
20 in 1989, a Spanish-language station.

21 Q But it was, you believe, oriented towards
22 foreign-language programming?

23 A It had foreign-language programming, and it had
24 English-language programming.

25 Q But it did have some foreign-language

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1 programming?

2 A Yes.

3 Q Now, turning your attention to PTV Exhibit 13-X,
4 this is a page from the Factbook about station KTMD in
5 Galveston-Houston. You see, Mr. Cooper, that it indicates
6 that KTMD was affiliated with Telamundo?

7 A Yes.

8 Q Do you know what Telamundo is?

9 A Yes.

10 Q What is it?

11 A It's an organization that produces and
12 distributes Spanish-language programming, and is a group
13 owner of television stations.

14 Q So, to sum up, Mr. Cooper, is it fair to say that
15 in selecting commercial stations, you started out with a
16 criterion of 80,000 distant subscribers, and then applied
17 your judgment and experience both to eliminate stations
18 above 80,000 and to add in two stations below 80,000
19 distant subscribers?

20 A That's a fair statement.

21 Q Now, you were here when Marsha Kessler testified
22 last week, weren't you?

23 A I was.

24 Q And do you recall her describing how she selected
25 stations to be included in the Public Television portion

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1 of the sample, is that correct?

2 A That was her work and she did that, yes.

3 Q You weren't involved in that work, were you?

4 A I was not.

5 Q And none of your judgments and experience went
6 into that work?

7 A None at all.

8 Q And do you recall that Ms. Kessler started out
9 with a single objective criterion of 100,000 distant
10 subscribers, is that correct?

11 A She so testified.

12 Q And we discussed the fact that there was one
13 station that met that criterion that was omitted apparently
14 by accident, correct?

15 A I remember that testimony.

16 Q But you recall Ms. Kessler testifying that she
17 did not use any judgment or discretion in choosing which
18 stations to include or exclude, aside from choosing the
19 100,000 subscriber cutoff?

20 A Yes, she also was using an objective -- single
21 objective standard in terms of making the selection.

22 Q I'm sorry, Mr. Cooper, you are not suggesting
23 that you used a single objective standard, are you?

24 A I said that I used an objective standard and my
25 judgment. Ms. Kessler used purely an objective standard.

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1 Q With no judgment.

2 A Without judgment.

3 Q Now, you are aware that Public Television has
4 previously criticized Program Suppliers's method of
5 selecting stations for inclusion in the Special Nielsen
6 Studies, aren't you?

7 A I don't have a clear memory of that at all.

8 Q You didn't think it would be worth checking into
9 that before selecting the stations to be included in the
10 1989 study?

11 A For the non-commercial stations?

12 Q Yes.

13 A I did not select the stations for the non-
14 commercial -- I did not select the non-commercial stations.

15 Q In your view, would it have been appropriate to
16 look at criticisms that PBS had made about sample selection
17 in --

18 MR. LANE: Mr. Chairman, I'm going to object to
19 this question. These are clearly questions for Ms.
20 Kessler. She was up here. It was clear that she selected
21 the non-commercial stations. I've let a few go through
22 just to establish that Mr. Cooper had nothing to do with
23 the process. I think any further questions are
24 inappropriate to him.

25 MR. OLSON: If I may be heard. Mr. Cooper is

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1 sponsoring this entire survey, which includes non-
2 commercial stations, Public Television stations, and all
3 of these exhibits list the Public Television stations that
4 were included in the survey. He is the architect of the
5 survey overall, and the idea that he cannot answer a simple
6 question about selection of another portion of the survey
7 doesn't make any sense.

8 MR. LANE: Mr. Chairman, we have the right to
9 select the witnesses who will testify about different parts
10 of our case. We did that. It was clearly stated. Mr.
11 Olson knew that. He had a chance to cross-examine Ms.
12 Kessler on any point he wanted about the selection. If he
13 wants to talk about viewing in Program Suppliers Exhibit
14 1 or something else that Mr. Cooper can testify, that's
15 fine with me, I won't object. What he is talking about is
16 the criteria and the selection was Ms. Cooper's (sic)
17 bailiwick, and not Mr. Cooper.

18 CHAIRMAN AGUERO: The objection is overruled and,
19 to the extent that he can, Mr. Cooper can answer the
20 question.

21 THE WITNESS: My only part in the selection
22 process was the proposal was made to include 20 non-
23 commercial television stations, and I agreed to that
24 proposal by Ms. Kessler.

25 BY MR. OLSON:

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1 Q So, the decision was not to have a 100,000
2 subscriber cutoff, but to choose 20 stations, is that
3 correct?

4 A That's correct.

5 Q However many distant subscribers they might have?

6 A It was my understanding that when we agreed on
7 the 20 stations, that Ms. Kessler then determined that the
8 20-station objective would be realized if the cutoff was
9 100,000 full-time distant subscribers.

10 Q So, for commercial stations, you started out with
11 an 80,000 cutoff, and then added and subtracted some,
12 right?

13 A That's correct.

14 Q And for non-commercial stations, you simply
15 decided "We're going to look at 20 stations and we'll let
16 the distant subscribers fall where they may", is that
17 right?

18 A No. No, of course not, that's not what I said.

19 Q In a sense, you decided to look at 20 stations
20 and not to look at more stations, even if they would have
21 satisfied the criteria for being included in the commercial
22 station sample?

23 A Yes. I think that if we had known, for example,
24 when Ms. Kessler was making the selection -- and I'm just
25 hypothesizing -- that there were 21 stations, 21 non-

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1 commercial stations, with 100,000 or more subscribers, that
2 we would have taken 21, but it was her -- apparently, and
3 according to her testimony -- it was her finding and belief
4 that there were only 20 such stations that were eligible
5 for inclusion under that criterion.

6 Q Where did that criterion come from?

7 A The criterion came after the judgment was made
8 to include 20 non-commercial stations in the sample. That,
9 I have testified to.

10 Q What was the basis for deciding on the number of
11 20 to be included?

12 A We felt that that would provide a reasonable
13 amount of -- sufficient data to be able to evaluate the PBS
14 shares of viewing and time.

15 Q Now, let me go back to the question that I asked
16 and that the Tribunal has ruled you may answer. The
17 question is, would it have been appropriate for Ms.
18 Kessler, in choosing the Public Television stations to be
19 included, to take into account criticisms that Public
20 Television had previously made about Program Suppliers'
21 selection process?

22 A It wouldn't have hurt if she did it, but I don't
23 know if she did or if it would be significant if she did.

24 Q Well, let me give you a concrete example, Mr.
25 Cooper. Do you recall earlier this morning we discussed

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1 the WPCB, the religious station with lots of distant
2 subscribers but with very low distant viewership?

3 A Yes.

4 Q Did you know that in our 1986 direct case, we
5 identified a Public TV station that was just like that.
6 It's WHMM, which is the Public TV station here in
7 Washington that is affiliated with Howard University?

8 A One of my favorite stations.

9 Q And that station is carried by well more than
10 100,000 -- I believe on the order of 160-170,000 distant
11 subscribers -- but if you look at its viewing hours, they
12 are extremely low and, in that respect, it is much like
13 WPCB.

14 Now, if Ms. Kessler had been looking out for
15 Public Television the way you were looking out for the
16 commercial stations, you would have excluded that station,
17 wouldn't you have?

18 A I would have excluded a station if it was not
19 reportable in the Nielsen report. In the case of -- what
20 Ms. Kessler did, as I indicated, was a completely objective
21 basis of selection, using a single criterion, and that is
22 the number of full-time distant signal households.

23 Q Mr. Cooper, you excluded 20 commercial stations
24 that had more than 80,000 distant subscribers, didn't you?

25 A It turned out that I had. It was not my

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1 intention to do that.

2 Q Not all those stations were unreportable from a
3 Nielsen point of view, were they?

4 A No, not all of them at all. That's why I have
5 admitted that using the data that were the best data that
6 were available to me at the time of station selection,
7 there were stations that were omitted that probably should
8 have been included, and stations included that should have
9 been omitted, but I think that these are relatively minor
10 in the overall perspective of the study.

11 Q But the fact is there were 20 commercial stations
12 with more than 80,000 distant viewers that you excluded
13 because of your judgment and experience, isn't that
14 correct?

15 A That's correct.

16 Q And Ms. Kessler did not apply any judgment and
17 experience, she just used that iron-clad objective factor,
18 isn't that right?

19 A That's my understanding, yes.

20 Q Now, we started out this morning by talking about
21 what Mr. Levin had to say about judgment sampling, and you
22 will recall that he said "In judgment sampling, personal
23 knowledge and opinion are used to identify those items from
24 the population that are to be included in the sample. A
25 sample selected by judgment sampling is based on someone's

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1 expertise about the population".

2 So, you used a lot of expertise in selecting the
3 commercial TV sample, didn't you?

4 A I surely did.

5 Q But Ms. Kessler used none in selecting the Public
6 Television station sample, isn't that correct?

7 A I'll say it for about the third or fourth time
8 today, that Ms. Kessler's selection was based completely
9 and entirely upon the single standard of the number of
10 distant signal -- full-time distant households.

11 Q Which is not the way that you selected your
12 sample, isn't that correct?

13 A That's true.

14 Q Thank you very much.

15 Now, Mr. Cooper, we've talked about, I believe,
16 a total of four stations this morning, three of them
17 identified on PTV Exhibit 14-X, and then I just mentioned
18 WHMM here in Washington, all of which have relatively high
19 numbers of distant viewers -- pardon me -- relatively high
20 numbers of distant subscribers, but very low viewing, is
21 that correct?

22 A I'm just trying again to judge the four stations
23 you're talking about. I don't accept that statement.
24 Which four are you talking about?

25 Q The four stations I'm talking about are the three

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1 stations --

2 A There are five on 14-X, you know?

3 Q Right. I'm talking about the three stations that
4 were not included in the sample -- KSCI, WCIU and KTMD --
5 and I'm also talking about a station that was included in
6 the sample, namely, WHMM, which is the Howard University
7 Public TV station.

8 A Yes.

9 Q Now, those are all stations that have programming
10 that has special appeal to some minority segment of the
11 population, is that correct?

12 A I think that as I indicated, I am a regular
13 listener and viewer of WHMM's programming and, in my view,
14 WHMM's programming is diverse and not directed exclusively
15 to any ethnic group.

16 Q No, but it does have more programming of interest
17 to the black community than most other television stations,
18 wouldn't you say that's true?

19 A I certainly can believe that is true, and I
20 commend WHMM for that kind of programming.

21 Q And cable systems apparently think that these
22 four stations are quite valuable since cable systems carry
23 them to reach quite substantial numbers of viewers, isn't
24 that correct?

25 A I think that cable systems find it to their

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1 advantage to carry these stations, yes.

2 Q It's a voluntary decision on their part, to carry
3 them?

4 A Certainly.

5 Q It's a business decision?

6 A Yes, I would say it's a business decision. The
7 only exception to that being a business decision is that
8 to the extent that a station serves a specialty group, it
9 may be a decision on the part of the franchising authority,
10 or franchising authorities, for the cable system to carry -
11 - require the cable system to carry such stations,
12 irrespective of the extent to which they are valuable to
13 the cable system operator.

14 Q So, in other words, cable systems operators need
15 to worry about not only keeping their subscribers happy,
16 but about keeping their franchise authority happy as well,
17 is that correct?

18 A Well, I wasn't speaking about keeping them happy,
19 you know, keeping the franchising, but conforming to the
20 requirements of the franchise.

21 Q Does your Nielsen study measure the value to a
22 cable system, of carrying a particular TV station in order
23 to maintain their franchise?

24 A No, it does not.

25 Q And it could be that a local franchise authority

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1 would want a cable system to carry a public television
2 station and that the cable operator might score points with
3 their franchise authority by doing so, is that right?

4 A Yes, and the cable system operator may be
5 carrying that station against his will.

6 Q Against his will, but keeping his franchise,
7 right?

8 A Yes, I appreciate that, it's just as a requisite
9 to his franchise, but it's not hardly any measurement of
10 the value to the cable system operator or to the cable
11 system subscribers, if he is just forced to carry it as a
12 requirement of the franchise.

13 Q Well, let's take KFCI. You'll recall that's the
14 station that has a mixture of ethnic programming out in Los
15 Angeles. Let's suppose that a cable operator insists that
16 -- pardon me -- a cable franchise authority insists that
17 the cable operator carry that because the franchise
18 authority wants to make sure that ethnic groups in that
19 community are being served with programming of interest to
20 them. Wouldn't you say it's of high value to the cable
21 operator to carry something that is necessary for them to
22 maintain their franchise?

23 A I wouldn't disagree with that. I think that they
24 would do what they had to do to have a franchise, which is
25 a very valuable asset.

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1 Q Mr. Cooper, just to clarify something that I
2 believe you discussed with Mr. Stewart yesterday -- Mr.
3 Chairman, would the Tribunal like to take a brief recess?

4 CHAIRMAN AGUERO: Yes.

5 (Whereupon, a short recess was taken.)

6 CHAIRMAN AGUERO: Let's go back on the record.
7 Before we continue with Mr. Olson and Mr. Cooper, Mr.
8 Cassler wishes to ask a question.

9 MR. CASSLER: Mr. Cooper, along the line of
10 questioning that Mr. Olson has been touching upon, in the
11 1983 Final Determination, it was mentioned that the power
12 of local franchising authorities to require the carriage
13 of certain stations did affect the Tribunal's attempt to
14 stimulate the marketplace, did skew it some, but since the
15 1983 year that we were looking at, there was the 1984 Cable
16 Act, which I think went into effect in 1986.

17 Did that change the power of local franchising
18 authorities to require the carriage of certain stations?

19 THE WITNESS: It is my understanding that it did
20 not, that, truly, the major aspect of the deregulation
21 related to the rates that cable systems could charge
22 subscribers. That was the main thrust of the Deregulation
23 Act.

24 MR. CASSLER: So, it continues unchanged by that
25 Act?

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1 THE WITNESS: I believe so.

2 CHAIRMAN AGUERO: Does this answer your question?

3 MR. OLSON: If I may just say for the record, I
4 have a contrary impression, but -- I don't want to become
5 a witness, but that's something that might be worth further
6 exploration.

7 BY MR. OLSON:

8 Q Is it fair to say, Mr. Cooper, that whether or
9 not cable systems have the power, legally, to require
10 carriage of a particular station, they certainly have some
11 moral suasion that they can employ for that purpose, is
12 that correct?

13 A You mean the franchising authorities.

14 Q Pardon me -- the franchising authorities, yes.

15 A Yes, they do.

16 Q Let me turn to another topic, Mr. Cooper --

17 CHAIRMAN AGUERO: Something you want to say, Mr.
18 Garrett? I saw your hand --

19 MR. GARRETT: I was just waving to Mr. Cassler.
20 How are you doing, Bob?

21 (Laughter.)

22 BY MR. OLSON:

23 Q Let me turn to another topic, Mr. Cooper. Is it
24 fair to say that all other things being equal, distant
25 Independent stations show more viewing in your study than

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1 distant network stations?

2 A Yes.

3 Q And that is, in part, because all the programming
4 on Independent stations counts whereas a large part of the
5 programming on the network stations is excluded because
6 it's ABC, CBS, or NBC network programming, correct?

7 A You are referring to the commercial stations,
8 yes.

9 Q Yes. Mr. Cooper, do you recall that yesterday
10 Mr. Stewart marked an exhibit, NAB 40-X, which was a list
11 of the percentages of distant Form 3 cable subscriber
12 incidents that were accounted for by the stations selected
13 in your 1989 study. Do you have a copy of that with you?

14 A I do not.

15 CHAIRMAN AGUERO: Mr. Cooper, I have an exhibit.

16 THE WITNESS: Did I give you back the other one?

17 CHAIRMAN AGUERO: No.

18 BY MR. OLSON:

19 Q Let me tell you, Mr. Cooper, that we have taken
20 data from both accounting periods for 1989 and done a
21 tabulation similar to that shown on NAB 40-X, for the
22 Independent stations in your sample, and I will mark our
23 calculations as PTV Exhibit 7-X.

24 (Whereupon, the document was

25 marked for identification as

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Exhibits Nos. PTV 7-X and PTV
8-X, respectively)

Mr. Cooper, I will represent to you that these calculations were done using the same Cable Data Corporation printouts dated August 12, 1991 that Mr. Stewart referred to yesterday, and that I believe were delivered to all the parties to this proceeding.

You will see, Mr. Cooper, if you turn to the final page of PTV Exhibit 7-X, that the number of distant subscriber incidents covered for both periods was almost identical to that that Mr. Stewart calculated for 1989-2, and that is 94.4 percent, do you see that, Mr. Cooper?

A I do.

Q And do you see that approximately 5.6 percent of the distant subscriber incidents to Independent stations were left out of the survey?

A Yes, I do.

Q Mr. Cooper, we have performed a similar calculation for the Public Television stations that were included in the 1989 Special Nielsen Study. I will again represent to you that these data were taken from that same August 12, 1991 Cable Data Corporation printout.

Do you see, Mr. Cooper, that for the Public TV stations, approximately 61 percent of the distant subscriber incidents were covered in the Nielsen Special

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1 Study?

2 A Yes, sir.

3 Q Mr. Cooper, we have prepared on a large chart an
4 illustration showing graphically the percentages of
5 different subscriber incidents that were excluded from your
6 Special Study for commercial Independent stations on the
7 one hand, and Public TV stations on the other hand, do you
8 see that?

9 A Yes, I do.

10 Q Now, let me also direct your attention to the
11 final sentence of the book, Statistics for Management, that
12 you provided to the Tribunal a few days ago. You will see
13 that says "But if a study uses judgment sampling and loses
14 a significant degree of "representativeness", it will have
15 purchased convenience at too high a price". And my
16 question to you, Mr. Cooper, is, do you believe that the
17 difference between these 5.6 little red houses and the 39
18 little red houses on this chart is too high a price?

19 A I don't think so.

20 Q Thank you, Mr. Cooper.

21 A Beautiful chart, by the way, Tom.

22 Q Thank you. So, it is your position, Mr. Cooper,
23 that a study that for one group of people uses an objective
24 criterion as modified by lots of experience and judgment,
25 and then for the other group uses a single objective

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1 criterion that is tougher than the starting criterion for
2 the other one and that is not modified with any experience
3 and judgment and that results in the exclusion of
4 approximately six times as many distant subscribers, that
5 that is a fair survey?

6 A I consider it to be a fair survey. What we have
7 done, and what Ms. Kessler has done, what I have done, is
8 to have increased the number of stations in each group from
9 the 1983 study to the 1989 study, by approximately the same
10 percentage, and that is about 25 percent.

11 Q Right, but you didn't make any effort to get the
12 same percentage of distant subscriber incidents for
13 Independent stations and for Public stations?

14 A We did not.

15 COMMISSIONER DAUB: Mr. Olson, would you mind
16 describing the chart for us by percentage perhaps?

17 MR. OLSON: Certainly. Commissioner Daub, the
18 left-hand side of this chart shows 100 houses. The houses
19 represent a distant subscriber incident -- that is, a
20 single cable household receiving a single distant TV
21 station -- and the black houses are those that are included
22 in the study, the red houses are those that are left out.
23 And you will find from PTV Exhibit 8-X -- pardon me -- 7-X, that
24 approximately 5.6 percent of the distant Independent
25 station subscribers were not covered in the Special Nielsen

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1 Study, and so we have one, two, three, four, five -- we
2 couldn't do the .6, but we have .5 houses that are shown
3 in red on this chart. On the other hand, in PTV Exhibit
4 8-X, we showed that 39 percent of the distant Public TV
5 subscriber incidents were excluded from the survey. And
6 so we have 61 black houses and then 39 red ones showing
7 those that excluded from the Special Study.

8 COMMISSIONER DAUB: Thank you.

9 BY MR. OLSON:

10 Q Mr. Cooper, in the Special Study, you start out
11 initially with all viewing to a particular station anywhere
12 in the country, is that correct?

13 A No.

14 Q Let me ask the next question and I think you will
15 agree with me. You start out with all the viewing and then
16 you exclude the viewing in the counties that Ms. Kessler
17 has identified as local counties, is that correct?

18 A I don't. Nielsen does, I don't.

19 Q Nielsen starts out with all the viewing shown
20 nationwide, in any county, to a particular station, and
21 then subtracts the viewing to the counties that are
22 identified as local?

23 A That's correct.

24 Q And the net of that subtraction is the total of
25 distant cable viewing, is that correct?

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1 A That's correct.

2 Q Now, you don't go and check to make sure there
3 is actually cable system in each county outside the local
4 counties, do you?

5 A I do not.

6 Q And you don't go to the Cable Data Corporation
7 and ask them to check whether the cable systems that may
8 exist in those counties have actually paid royalties into
9 the fund?

10 A There is a very good assumption that cable
11 systems that carry a signal on a distant basis, remitted
12 the proper amount in terms of royalty to the Copyright
13 Office.

14 Q Mr. Cooper, I understand it's an assumption, I
15 just wanted to make clear that it is an assumption as
16 opposed to something that you check for every distant
17 county in the study.

18 A We certainly did not.

19 Q Mr. Cooper, several of my brethren have discussed
20 with you the difference between the four-cycle and the six-
21 cycle data, and I don't want to belabor that, but I just
22 wanted to ask you a couple of questions.

23 By my count, the 20 Public Television stations
24 that were included in your sample, included only 11 that
25 had six-cycle data, would you accept my numbers on that?

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1 A Yes, I would.

2 Q And in your Exhibit ARC-6, you adjusted the six-
3 cycle data to reflect the fact that some stations were
4 sampled only during fewer than six cycles, is that correct?

5 A That's correct.

6 Q Now, you have not presented any numbers to the
7 Tribunal that make that same correction specifically for
8 Public Television programs, have you?

9 A No, but the Public Television stations are
10 included in ARC-6.

11 Q Right, but you have not -- in Program Suppliers
12 Exhibit 1, the numbers in the six-cycle data in that
13 exhibit do not reflect the projections that you made in
14 ARC-6, is that correct?

15 A Are you referring to Exhibit 1, not ARC-1?

16 Q I'm referring to the big, fat exhibit --

17 A That's not ARC-1.

18 Q I said Program Suppliers Exhibit 1.

19 A Okay.

20 Q Let me start again so the record won't be
21 confused. Is it correct that the summary pages that show
22 viewing for particular categories of programs in Program
23 Suppliers Exhibit 1, do not reflect the adjustments that
24 you have made in ARC-6?

25 A They do not. The numbers in there are the actual

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1 numbers from the Nielsen Company.

2 Q Mr. Cooper, you and Mr. Garrett had a discussion
3 a few days ago about Cumes, do you remember that?

4 A It was briefly mentioned.

5 Q Could you just explain to the Tribunal what a
6 Cume means in the context of a station?

7 A It is the amount of viewing irrespective of
8 programming, during a daypart, over a period generally of
9 one week.

10 Q Let me put that in my words and tell me if I've
11 got it right. Is it fair to say that if there were 100
12 households in a community and 50 of them tuned into a
13 particular station at some point during the week, however
14 often they did it, as long as they did it once, that that
15 station would have a Cume of 50?

16 A In terms of a 24-hour-day daypart, yes.

17 Q Now, it's possible to calculate Cumes on a weekly
18 basis, is that right?

19 A Generally, the Nielsen Company and the Arbitron
20 Company compute them on a weekly basis, for a simple
21 reason, and that is that their diaries only cover a one-
22 week period.

23 Q But it's also possible, in principle, to look at
24 Cumes on a monthly basis, is that correct?

25 A Neither Arbitron nor NSI can do that.

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1 Q But if they do a special -- by special
2 arrangement, they could that, isn't that right? In
3 principle, they could do that?

4 A Yes, by special arrangement, it could be done.

5 Q Now, cable operators sell subscriptions on a
6 monthly basis, isn't that right?

7 A The rates are on a monthly basis, yes.

8 Q That's how often people pay their bills?

9 A Not necessarily.

10 Q That's how often the cable company would like
11 them to pay their bills, right?

12 A That's probably more close to it.

13 Q Now, a monthly Cume is basically the percentage
14 of the TV households that tuned into a particular station
15 over the course of a month, right?

16 A That tuned into it or that reported viewing any
17 program on that station for five minutes or more, during
18 the period of a month.

19 Q Now, a monthly Cume statistic might well be of
20 interest to a cable operator in looking at particular
21 channels, isn't that right?

22 A It might be, but it would be very foolish to try
23 to -- a silly kind of number to look at.

24 Q And why is that?

25 A Because it does not provide any information, just

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1 merely a Cume, on the extent to which that station is
2 viewed, except that it was viewed at one time, for any
3 period longer than five minutes, during the course of a
4 month, or a week, or whatever period you want to deal with.

5 You will recall that the Chairman had indicated
6 that he did a lot of "grazing" through a lot of channels
7 one day and, in a few minutes, he went through and looked
8 at, I don't know, it sounded like eight or nine different
9 channels, looking for a program --

10 CHAIRMAN AGUERO: Twenty.

11 THE WITNESS: -- and, presumably, if he had
12 rested on any of those channels for five minutes or more,
13 according to the Nielsen Television Index, the metered type
14 of measurement, he would have been included in the Cume for
15 that station.

16 BY MR. OLSON:

17 Q But if you had information about the average
18 amount of time that each of those households in the Cume
19 had viewed the station, that would be more meaningful,
20 would it not?

21 A Yes, it would.

22 Q Now, Mr. Cooper, you recall that last week I
23 spoke briefly with Mr. Valenti about the relevance of
24 Nielsen viewing data to cable operators, do you recall
25 that?

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1 A Yes.

2 Q And I believe that we agreed that Nielsen data
3 are very important to broadcasters because they sell
4 advertising and they need to know how many viewers are out
5 there seeing their advertisements, right?

6 A It's important to broadcast stations -- very
7 important -- and to networks, yes.

8 Q And the business that cable operators are in, for
9 the most part, is selling cable subscriptions, isn't that
10 right?

11 A Not just selling them, but retaining subscribers
12 is very important.

13 Q Selling subscriptions and maintaining the
14 subscriptions?

15 A Yes. I think that these are not equally
16 significant. The major thing for cable systems operators
17 is not to get turnover of subscribers, but to retain them
18 over a period of time.

19 Q That's called "churn" when you have a lot of
20 turnovers, correct?

21 A That's correct, which is bad.

22 Q And if you want to avoid churn, you want to keep
23 your customers happy, isn't that right?

24 A That's correct.

25 Q So, let me just explore with you a little bit,

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1 the relationship between viewing on the one hand, and
2 subscriber satisfaction on the other hand.

3 Mr. Cooper, have you ever wondered about the
4 repair record of a new car that you were thinking about
5 buying?

6 A Yes.

7 Q Where would you go to look for information about
8 that?

9 A The best source that I know of is Consumers Union
10 Reports.

11 Q And they do a survey of their readers to get that
12 information, isn't that right?

13 A I believe that that's the source of it.

14 Q Let me mark --

15 CHAIRMAN AGUERO: On that question, I think that
16 we have an expert on the Tribunal, Commissioner
17 Argetsinger, and then in repairs, Bob Cassler.

18 (Laughter.)

19 MR. OLSON: I am putting in the record an exhibit
20 that I have premarked, continuing our downward slide in
21 exhibit numbers, as PTV Exhibit 3-X.

22 (Whereupon, the document was
23 marked for identification as
24 Exhibit No. PTV 3-X)

25 MR. LANE: Mr. Chairman, might I ask if this will

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1 have a sponsoring witness?

2 MR. OLSON: Mr. Chairman, if we plan to use it
3 as more than an impeachment exhibit, it will have a
4 sponsoring witness.

5 CHAIRMAN AGUERO: How do you plan to use the
6 exhibit, Mr. Olson?

7 MR. OLSON: It is our current intention to offer
8 it as part of our rebuttal case, but it is -- at a minimum,
9 we would propose to use it as an impeachment exhibit, at
10 this time.

11 MR. LANE: If it's going to be part of the
12 rebuttal case, I won't have an objection.

13 BY MR. OLSON:

14 Q Mr. Cooper, I direct your attention to page 578
15 of PTV Exhibit 2-X. I wonder if you would just take a
16 moment to read the description under the head Ratings, that
17 starts on page 578, of how the survey was conducted.

18 A (Perusing document.)

19 Q And if you would just let me know when you are
20 finished, Mr. Cooper.

21 A It goes onto the next page. Do you want me --

22 Q If you could read the descriptive material under
23 the heading Ratings on both pages 578 and 579.

24 A (Perusing document.) I have read the -- I
25 haven't looked at the data, but I have looked at the

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1 description.

2 Q The questions about different cable services were
3 asked as part of the Consumers Union 1990 Annual
4 Questionnaire, do you see that?

5 A That's what it says.

6 Q And, presumably, that's the same questionnaire
7 in which they ask people about the repair records of their
8 cars, is that right?

9 A I don't know if that's true.

10 Q And you see that each of these channels was rated
11 by at least 4,400 of their current or former subscribers?

12 A It says so.

13 Q And that most of them are rated by 25,000 or
14 more, do you see that?

15 A I see that.

16 Q And you see under the caption of "3. Overall
17 Score", it says, "Had everyone judged a channel excellent,
18 its score would have been 100; had everyone judged it very
19 poor, its score would have been 0", do you see that?

20 A Okay.

21 Q Let me mark an exhibit that attempts to summarize
22 the information in the Consumer Report study in a way that
23 will be easier for us all to follow. This is PTV Exhibit
24 4-X.

25 (Whereupon, the document was

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marked for identification as

Exhibit No. PTV 4-X)

COMMISSIONER DAUB: Mr. Olson, I take it that these are non-profit organizations that --

MR. OLSON: Consumers Union is, to the best of my knowledge, is a non-profit organization.

COMMISSIONER ARGETSINGER: Along those lines, Mr. Cooper, would you care to speculate, the members of this Consumers Union, what demographics -- how they relate to average Americans?

THE WITNESS: I think that Consumers Union states this in the carry-over, in the last sentence in the block three on page 578, which carries over to 579. I says, "These results pertain only to Consumer Reports readers, whose viewing habits may differ from those of Americans in general".

My own knowledge and my own feeling with respect to Consumer Reports and the Consumers Union is that this organization -- that the subscribers and the members, if you would, of the Consumers Union, are generally demographically of a higher educational and higher income level than the population as a whole. That's my understanding.

BY MR. OLSON:

Q But you consider the results of the auto repair

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1 survey to be sufficiently reliable that you look to them
2 when you're trying to decide whether to buy a new car, is
3 that correct?

4 A They would be something that I would take into
5 consideration, yes.

6 Q Mr. Cooper, let me direct your attention to the
7 second page of PTV Exhibit 3-X, which is the first page
8 that has tests. You will see that the second sentence on
9 that page says "Our readers are particularly knowledgeable
10 on the subject: 75 percent subscribe to a cable service,
11 compared with 60 percent for the country as a whole".

12 A That indicates also a demographic difference
13 between Consumers Union subscribers and the total
14 population.

15 Q But they certainly include lots of cable
16 subscribers, which is the universe we're interested in in
17 this proceeding, isn't that right?

18 A We are particularly interested in cable
19 subscribers.

20 Q Now, Mr. Cooper, I direct your attention to PTV
21 Exhibit 4-X, which is the summary document that we prepared
22 based on the Consumer Reports study. You will see that the
23 Discovery channel got the very highest rating in this
24 survey. It got a rating of 77, do you see that?

25 A Yes.

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1 Q And you see that there was a tie for second place
2 between PBS and the Cable News Network, is that right?

3 A Yes.

4 Q And where is the highest ranked superstation on
5 this list, Mr. Cooper?

6 A I think you in bold -- I'd be blind not to see
7 that you refer to number 13, WTBS.

8 Q And where are the other major superstations
9 listed on this survey?

10 A One directly below it, WGN, and you would have
11 to go to number 29 for WPIX and WWOR.

12 Q Now, Mr. Cooper, on PTV Exhibit 3-X, you see on
13 page 578, the portion that you were reading earlier, do you
14 see where it says "differences of two points or more in
15 score are meaningful"?

16 A Again, I did read that. Whether this is a
17 statistically sound determination is somewhat questionable
18 to me.

19 Q What is the difference in the score received by
20 PBS and by the largest superstation, WTBS?

21 A Fourteen, according to this judgment, on the
22 overall score.

23 Q Mr. Cooper, let's look at the channels that are
24 up towards the top of this list. You are familiar with the
25 Discovery channel?

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1 A I am in a position of not being a cable
2 subscriber in Washington because cable service is not
3 available to me, but I know what the Discovery channel is.

4 Q Do you know anything about what its household
5 audiences are as measured by Nielsen?

6 A Relatively small. Among cable homes, the
7 Discovery channel would normally have a rating of between
8 2 percent and 3 percent, for any of the programs that are
9 transmitted by the Discovery channel.

10 Q Mr. Cooper, I'm going to mark for the record an
11 exhibit that has been premarked as PTV Exhibit 5-X, and
12 this document is captioned Cable Network Prime Time Ratings
13 Among Subscribers and Penetration Trends.

14 (Whereupon, the document was
15 marked for identification as
16 Exhibit No. 5-X)

17 COMMISSIONER ARGETSINGER: Mr. Olson, before we
18 get away from 4-X -- Mr. Cooper, I am looking at this list.
19 Are some of these distant carriage, or are some of these
20 cable-originated?

21 THE WITNESS: Most of the items on this list are
22 Basic cable network. The only ones which are not are the
23 ones -- the few superstations that are listed, plus PBS is
24 possibly also distributed, but the others are not.

25 COMMISSIONER ARGETSINGER: The others aren't

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1 distant carriage.

2 THE WITNESS: No.

3 BY MR. OLSON:

4 Q Mr. Cooper, let me just pursue Commissioner
5 Argetsinger's point for a moment. If you look at PTV
6 Exhibit 4-X, which is the summary sheet, would you look
7 down there and confirm that all of the channels that are
8 at issue in this proceeding are shown in bold?

9 A No.

10 CHAIRMAN AGUERO: WTBS, WGN, PBS, WPIX, WWOR TV
11 and Fox Network.

12 THE WITNESS: You said all of the channels --

13 BY MR. OLSON:

14 Q Pardon me. Let me state the question to make
15 sure that I get it accurately. The only channels listed
16 on PTV Exhibit 4-X that are at issue in this proceeding,
17 are marked in bold.

18 A No.

19 Q What other channels --

20 A You are saying that on 4-X, there are only four
21 channels, if you would, that are involved in this
22 proceeding, but this is not all of the channels that are
23 involved in this proceeding.

24 Q I understand that. Let me ask my question one
25 more time.

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1 Are there any channels on PTV Exhibit 4-X that
2 are not indicated in bold, but that are at issue in this
3 proceeding?

4 A No.

5 Q Thank you.

6 A I have excluded those -- I assume that the ABC,
7 NBC and CBS listings here refer to the network programs of
8 those facilities.

9 Q I make that same assumption, Mr. Cooper.

10 Directing your attention to PTV Exhibit 5-X,
11 which is the ratings information, do you have that in front
12 of you, Mr. Cooper?

13 A Yes, I do.

14 Q Would you take a look at what the prime time
15 ratings for the Discovery channel were during the two most
16 recent seasons indicated on PTV 5-X?

17 A Zero point eight and zero point nine.

18 Q And while we're at it, how about for CNN?

19 A One point one and one point two, is that what
20 you're asking?

21 Q Right. And for CNN Headline News which, I
22 believe, is indicated as HLN?

23 A Zero point four and zero point four. Again, my
24 problem with this is that I don't know the time period
25 that's covered by this report. Are these a season, or are

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1 they -- I don't know what these are. These are 12-month
2 averages?

3 Q I believe, Mr. Cooper, that these are 12-month
4 averages, but we will be sponsoring this as a rebuttal
5 exhibit, and we will clear up any issue that may arise
6 about that.

7 Let me just ask you, Mr. Cooper, you see that the
8 Discovery channel was the top-rated channel in the Consumer
9 Reports study?

10 A Yes.

11 Q And you see that it is nowhere near the top-rated
12 channel in terms of prime time ratings, is that correct?

13 A Yes. It's not that far, but it's not the top,
14 for sure.

15 Q And you see that CNN Headline News was tied for
16 fourth in the Consumer Reports survey?

17 A Yes.

18 Q With a 74 rating, and you just mentioned that
19 Headline News had a prime time rating of only .4?

20 A Yes, but I don't see CNN itself here on the list.

21 Q It's tied for second place on the Consumer
22 Reports study.

23 A Okay.

24 Q Now, you see that WTBS, on PTV Exhibit 5-X, has
25 a prime time rating of 2.4 in the 88-89 season, and 2.2 in

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1 the most recent season shown on 5-X, is that right?

2 A Yes.

3 Q But it ranked 13th in terms of consumer
4 satisfaction in the Consumer Reports, is that accurate?

5 A You now mention or use the term "consumer
6 satisfaction", and that's an interpretation you're making
7 of their scoring of Excellent, Very Good, Good, Fair, Poor,
8 Very Poor.

9 Q Call it what you will, the results of the
10 Consumer Reports study. You see that Headline News was
11 tied for fourth, but had very low prime time ratings.

12 A Okay.

13 Q In fact, Headline News had just about the lowest
14 prime time ratings of any channel on PTV 5-X, isn't that
15 right?

16 A The question I have is that I think that as a
17 viewer, for example, not having cable at home, I do view
18 channel 5 in Washington at 6:00 a.m. to 6:30 a.m., Monday
19 through Friday, and I believe that program is called CNN
20 Headline News. I would not know how to discriminate
21 between Headline News, which suggests very short programs
22 in that half-hour program. I think that other people
23 confronted with the term CNN Headline News, or Headline
24 News, would be confused.

25 Q Mr. Cooper, you are not a cable subscriber, is

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1 that right?

2 A That's correct.

3 Q And the people who filled out this questionnaire
4 were cable subscribers, is that right?

5 A Seventy-five percent of them were, not all of
6 them.

7 Q Pardon me, you are correct. Do you believe that
8 if the same CNN Headline News is shown on a broadcast
9 station as opposed to being shown on cable, that people
10 will have a different opinion of it?

11 A It doesn't suggest that this viewing is on a
12 cable channel. I mean, if the same programs are available
13 over-the-air, I don't know what this is referring to.

14 Q Is the Discovery channel available over-the-air,
15 to the best of your knowledge?

16 A No, that one is not, but we talked about already,
17 with respect to some of these other things, including the
18 network stations, the networks per se, which are available
19 over-the-air as well as on cable. It's a mixed bag. PBS
20 particularly is a mixed bag.

21 Q Mr. Cooper, you are not suggesting that PBS
22 stations are carried -- are non-broadcast cable services,
23 are you?

24 A I'm suggesting that the opportunity of people to
25 view PBS both over-the-air and via cable, is greater than

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1 it is for services which are available only on cable.

2 Q Right, but, for example, the Discovery channel -
3 - if you look at PTV Exhibit 5-X, you will see that the
4 Discovery channel is available to 56 percent of all
5 households in the country, isn't that right?

6 A No.

7 Q Of all television households in the country.

8 A No. Cable households.

9 Q Mr. Cooper, are you suggesting that WTBS is
10 available only to 59 percent of cable households?

11 A No. I think your headings are what's bothering
12 me. If that penetration relates to all homes in the United
13 States, then I can understand it, yes. The percentages
14 under Household Penetration for total cable are
15 approximately what I have said. I had estimated in my
16 testimony that cable penetration in 1989 was 57 percent,
17 and your figure here is 58 percent, so I will accept that.

18 Q And, indeed, WTBS is shown on almost all cable
19 systems, right?

20 A Yes, indeed.

21 Q And it's shown here as having a 59 percent
22 penetration?

23 A In 89-90, yes.

24 Q So, that suggests that these numbers here are
25 percentages of all U.S. TV households, is that correct?

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1 A I believe that the numbers refer to that because
2 of the previous are with respect to total cable.

3 Q So, you see that 56 percent of all the TV
4 households in the country have access to the Discovery
5 channel?

6 A According to these data, yes.

7 Q And you understand that only current and former
8 subscribers to cable responded -- pardon me -- current or
9 former subscribers to a particular channel, rated those
10 channels? Do you understand that?

11 A I understand what you are saying, I'm just trying
12 to confirm it.

13 Q Mr. Cooper, you have been involved in these
14 proceedings for a number of years, is that right?

15 A Yes, that's correct.

16 Q Going back as far as 1983 in the Phase I
17 litigation, is that right?

18 A That's correct.

19 Q Has the appropriateness of relying on the Nielsen
20 Study in this proceeding changed between 1983 and 1989?

21 A Not at all.

22 Q Now, one of the criteria that the Tribunal
23 considers is harm, isn't that right?

24 A Yes.

25 Q And another criterion is benefit to the cable

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1 operator?

2 A Yes.

3 Q And another one is marketplace value, correct?

4 A Yes.

5 Q And you believe that viewing as measured by your
6 Special Nielsen Study is an appropriate measure of harm,
7 of benefit, and of marketplace value, with regard to
8 Syndicated Series and Movies, isn't that correct?

9 A That's correct.

10 Q Now, would you agree with me that viewing is not
11 an appropriate measure of harm, benefit and marketplace
12 value, with regard to programming other than Syndicated
13 Series and Movies?

14 A No, I don't agree with you.

15 Q Mr. Cooper, you've testified before in these
16 proceedings, haven't you?

17 A Yes.

18 Q In fact, you testified in the 1983 proceeding
19 that we just mentioned, right?

20 A I just said I did.

21 Q Before some of the same members of the Tribunal?

22 A That's correct.

23 Q And Mr. Cassler was here as well, isn't that
24 right?

25 A That's correct.

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1 Q And almost the entire cast of lawyers was here
2 as well, too, right?

3 A Yes, that's true.

4 Q And you recall that there was a hearing in the
5 Summer of 1985, right?

6 A That would be an appropriate time for a review
7 of the '83.

8 Q And before you testified, you took an oath to
9 tell the truth, didn't you?

10 A Yes, indeed,

11 Q And you fully understood what that meant, right?

12 A I certainly understand what it means to tell the
13 truth.

14 Q And even at that time, you were already a very
15 experienced witness, right?

16 A If you want to judge it that way, yes.

17 Q And you did make every effort to answer questions
18 truthfully in that testimony, didn't you?

19 A Certainly.

20 Q Let me hand you what I have marked as PTV Exhibit
21 2-X -- this is the lowest number we'll look at today.

22 (Whereupon, the document was
23 marked for identification as
24 Exhibit No. PTV 2-X)

25 Q Mr. Cooper, would you look at the very first page

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1 of PTV Exhibit 2-X.

2 A Yes.

3 Q You see that this is a transcript from a
4 proceeding that took place on July 2, 1985.

5 A Yes.

6 Q And that this was in the 1983 Royalty
7 Distribution Proceeding, correct?

8 A Yes.

9 Q And if you will turn to page 993 on PTV Exhibit
10 2-X, you will see that on the list of witnesses, you were
11 listed as one of the witnesses that day?

12 A Yes.

13 Q And you will see that your testimony started on
14 page 1097?

15 A Yes.

16 Q You recall that you were being cross-examined by
17 Mr. Ferrall, for NAB?

18 A Yes.

19 Q Recall it as though it were yesterday, right?

20 (Laughter.)

21 Mr. Cooper, would you turn to the final page of
22 PTV Exhibit 2-X, please. Would you please read into the
23 record the underlined questions and answers on that final
24 page?

25 A The question by Mr. Ferrall was -- the statement

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1 by Mr. Ferrall --

2 "Q We've also agreed that viewing is an
3 appropriate measure of harm, benefit and marketplace
4 value?

5 "A I will agree with that, as far as syndicated
6 programs are concerned.

7 "Q But not as far as other programming is
8 concerned?

9 "A That's correct.

10 "Q You do not agree with it as far as other
11 programming is concerned?

12 "A I do not agree with it with respect to other
13 categories of programming."

14 MR. OLSON: I have no further questions.

15 CHAIRMAN AGUERO: Thank you very much, Mr. Olson.

16 It's 12:00 o'clock. Do you wish to continue?
17 How long will it take, Mr. Lane, for the redirect, more or
18 less?

19 MR. LANE: At this stage, 15 minutes.

20 CHAIRMAN AGUERO: And Devotionals?

21 MR. CAMPANELLI: Sir, I think it will only be
22 about 20 minutes.

23 CHAIRMAN AGUERO: Then would you come up? Mr.
24 Richard Campanelli, on behalf of the Devotional Claimants.

25 CHAIRMAN AGUERO: We will have a five-minute

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1 recess.

2 (Whereupon, a short recess was taken.)

3 CHAIRMAN AGUERO: Mr. Campanelli?

4 MR. CAMPANELLI: Thank you, Mr. Chairman.

5 CROSS-EXAMINATION

6 BY MR. CAMPANELLI:

7 Q Mr. Cooper, let me introduce myself. I'm Richard
8 Campanelli. I wasn't one of the people here in '83, but
9 I didn't have anymore hair in 1983.

10 (Laughter.)

11 Mr. Cooper, you testified yesterday, when you
12 were talking about religious stations with Mr. Stewart I
13 believe, that in the Program Suppliers Exhibit 1, there
14 are two religious format stations, KFCB and WCFC.

15 A There are at least two. There is a third one
16 which, I believe, is also primarily a religious station.

17 Q Which one would that be?

18 A I'll tell you that in a moment. (Perusing
19 document.) That was -- not primarily -- it is a
20 combination of an Hispanic station and religious station
21 in terms of the amount of programming of a devotional
22 nature that's broadcast, and that is WNJU.

23 Q WNJU. And as to the two stations I mentioned,
24 KFCB and WCFC, you testified yesterday that you weren't
25 aware at the time that you selected the sample of 147

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1 stations, that they were religious stations, is that right?

2 A That's correct, I did not give that any special
3 consideration at that time.

4 Q And you weren't aware of it at the time?

5 A No, I was not.

6 Q And what about with regard to WNJU, were you
7 aware of its --

8 A No. I made the statement with respect to WNJU
9 as a result of analyzing the data from the 1989 study.

10 Q Recently?

11 A Yes.

12 Q Now, earlier today and yesterday you testified
13 that you didn't include WPCB in the survey, even though it
14 had almost 300,000 distant subscribers, because you looked
15 at the Nielsen report and determined that it was
16 insignificant and it had an insignificant amount of
17 viewing, isn't that right?

18 A That's correct.

19 Q And you said today that it wasn't worth the time
20 and the money to include it?

21 A Yes, sir.

22 Q I'd like you to look at this document, which I
23 request be marked as Devotionals Exhibit 13-X.

24 (Whereupon, the document was

25 marked for identification as

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Exhibit No. Devotionals 13-

X)

Now, Mr. Cooper, these are stations that were selected from the exhibit that you received yesterday, NAB 37-X, and the source is the Cable Data Corporation. Did you specifically review these stations that are on Exhibit 13-X, to determine whether their viewing was insignificant and not worth the time and money to include in the survey?

A You mean all the stations on 13-X?

Q Yes, sir.

A No, sir. The only one I looked at was WPCB, from that standpoint.

Q Do you recall at the time how you made the determination not to include these stations, all of which had more than 80,000 subscribers, distant subscribers?

A I can't reconstruct that exactly.

Q Mr. Cooper --

A I do know --

Q I'm sorry.

A -- WHFT, which is on your Exhibit 13-X, is a Miami station and, like WPCB, it is reportable on a daypart basis only, again, reflecting a minimal audience.

Q And how do you know that, sir?

A This is from the Nielsen Viewers in Profile report.

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1 Q Okay.

2 A WKLI in Richmond, Indiana, is in that same
3 capacity. It is also a station which is reportable on a
4 daypart basis only, again, reflecting minimal viewing.

5 Q What about --

6 A The same source for that one. WCLF -- I don't
7 know if WCLF was on Exhibit 37-X.

8 Q I think it was. I think it was on the last page
9 of 37-X, which is the 1989-2 period.

10 A Oh, I see it now, on the top of the page, the
11 third page of that document, and I did not review the data
12 for WCLF.

13 Q And you didn't do at the time of deciding the
14 sample?

15 A I did not.

16 Q You didn't do at the time of deciding what to
17 include in the sample and you didn't do it yesterday, is
18 that correct?

19 A That's correct.

20 Q Mr. Cooper, do you recognize these stations on
21 Devotional Exhibit 13-X, this page I just gave you, as
22 religious stations?

23 A I don't recognize them that way except for WPCB.
24 All I did was to review the Nielsen document for the
25 stations listed on the first two pages of 37-X.

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1 CHAIRMAN AGUERO: Where is the WCLF station
2 located?

3 MR. CAMPANELLI: Clearwater, Florida.

4 THE WITNESS: Near Dunedin.

5 (Laughter.)

6 CHAIRMAN AGUERO: Oh, near Dunedin -- Clearwater.

7 This is Mr. Kennedy's station, no?

8 MR. CAMPANELLI: I believe so.

9 CHAIRMAN AGUERO: He came before us about three
10 years ago, yes.

11 BY MR. CAMPANELLI:

12 Q Do you recognize them as specialty stations, Mr.
13 Cooper?

14 A At this time, the answer was no.

15 Q The Devotional Claimants have put an exhibit in
16 the record which we will be sponsoring later, which will
17 identify these as religious specialty stations, and I ask
18 for the moment that you just assume that.

19 A I will assume that on the basis of your
20 statement.

21 Q So, what we have is, you know of two stations
22 that were religious format stations plus another that is
23 a mixture of religious and Hispanic station, WNJU, and
24 these four stations here, assume they are religious, that
25 had in excess of 80,000 distant subscribers that, if you

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1 would just use an objective cutoff of 80,000, all of them
2 would have been included in the survey, is that correct?

3 A If that was the single basis, yes, they would
4 have been included.

5 Q And so four of seven of those were excluded on
6 the way you ultimately decided to select your sample
7 stations?

8 A They were excluded, yes.

9 Q Now, Mr. Cooper, let me ask you, WPCB had almost
10 300,000 subscribers, and you decided to look at the Nielsen
11 viewing at the time, I take it, to --

12 A I had testified earlier that I'd been familiar
13 with the WPCB situation well before these proceedings
14 began.

15 Q Well, as I said, WPCB had 300,000, because of
16 your familiarity and general knowledge of the station,
17 perhaps you decided to leave it out of the survey --

18 A I had no data from Nielsen for it.

19 Q Okay. Now, when that happened, did you look at
20 other stations, either in the 147 or others, that were
21 excluded but had in excess of 80,000 distant subscribers,
22 and try to determine whether they had adequate Nielsen
23 viewing to be included in the survey?

24 A No, I did not. I thin the only one, truly, that
25 I had examined from that standpoint at the time the

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1 selection was made, was WPCB.

2 Q Well, what gives you confidence that all the
3 other stations -- say, I guess we could go more than
4 300,000, but let's just say because PCB was 300,000 -- what
5 gives you confidence that stations with less than 300,000
6 distant subscribers would have had adequate -- at the time
7 you were selecting this thing, what gave you confidence
8 not to look over all those other stations or these 20
9 stations that were left out?

10 A Just a matter of my experience and knowledge of
11 television stations generally.

12 Q Which would translate into your "gut" feeling
13 about these things?

14 A That's correct -- my judgment, right.

15 Q Okay. I might also direct your attention to, if
16 you have it still, NAB Exhibit 37, and I think we've talked
17 about it just a little bit, but I guess the same analysis
18 would apply then, with regard to KSCI and WLTV, which are
19 foreign-language stations on that list --

20 A KSCI?

21 Q KSCI.

22 A Yes, KSCI is also a dayparts only reported.

23 Q And WLTV?

24 A I didn't look at WLTV, so I really don't know
25 anything about WLTV.

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1 Q Well, that we will also be able to demonstrate
2 later is a foreign-language station, specialty station, so
3 the same analysis would apply there -- although having
4 80,000, you just had a sense that they should be excluded?

5 A What we're doing now is referring to counts of
6 subscribers as of August, 1991. The selection that I made
7 was based upon data for June, 1990, and I don't know
8 whether these same numbers would apply.

9 Q Let's take a turn to a different topic for a
10 little bit -- we could end with this topic -- and it will
11 be a little easier topic to talk about.

12 I want to turn back to the diaries and the
13 compilation of the diaries, the NSI diaries that comprise
14 the report.

15 You testified, didn't you, that the way the
16 diaries are compiled is that they are in the household and,
17 if there's multiple TV sets, whoever is watching, either
18 they are supposed to complete the diary or it is supposed
19 to be completed for them, for each quarterhour of viewing.

20 A That's correct.

21 Q And the diary is supposed to be completed, or an
22 entry is supposed to be made wherever there is at least a
23 five-minute increment within a quarterhour that a show is
24 viewed?

25 A Those are the instructions for the diary keeper.

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1 Q And that would be true for grandparents and it
2 would be true for little children who don't know how to
3 write, isn't that correct?

4 A Yes, presumably the parent would then make the
5 entry for the child.

6 Q Now, I just want to pursue that with you a little
7 bit. Let's say that there is a child who has got a TV up
8 in his bedroom, and he is watching Superbook, which is a
9 CBN produced program, and he watches it for a half-hour on
10 Saturday morning. It's a rainy day, he's watching TV for
11 three hours on Saturday morning, and his father is out
12 working on the car, getting advice from the Tribunal.

13 A Consumers Report.

14 Q If he's like me, he's out there for a lot more
15 than three hours but, anyway, let's say he's out there.
16 Now, if he's going to fill out this diary
17 contemporaneously, he would have to go in every
18 quarterhour, right, and check with his four-year-old who
19 is watching the show.

20 A If he were to do it contemporaneously, or he
21 could do it on a recall basis. He could ask the child what
22 the child what he was viewing, or had viewed.

23 Q So, let's say -- just speaking hypothetically --
24 -- let's say, the show was on -- Superbook was on from 9:00
25 to 9:30 on Saturday morning. The father comes in at noon,

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1 exasperated over his failures with the car, and he comes
2 and he says, "Okay, son, what were you watching from 9:00
3 to 9:15, and what did you watch for at least five minutes
4 from 9:00 to 9:15", and he would have make that entry,
5 right?

6 A He would ask, "Were you watching television this
7 morning? What did you see?"

8 Q And he would have to expect the child to recall
9 all three hours.

10 A Whatever, yes.

11 Q And if the child --

12 A The same thing, of course, would apply to any
13 other type of program that the child was watching.

14 Q Yes. But to fill out the diary accurately,
15 because the diary requires quarterhour responses, he would
16 have to know whether the child changed the channel and, in
17 fact, you would have to ask the same thing of a teenager
18 who didn't fill out the diary, as well, or any other
19 visitor to the household who might have not filled out the
20 diary contemporaneously, isn't that right?

21 A I think that's true.

22 Q So, if the child changed the channel and it was
23 the first 15 minutes, he would have to get that, and the
24 second. So, I guess you can see where I'm going with this
25 question. Isn't there some element of lack of accuracy

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1 that would creep in?

2 A Oh, there's no question but the fact that the
3 diary methodology, with respect to the viewing by minors,
4 for example, does present problems.

5 Q Now, let's turn to a different question, which
6 is how these viewing hours translate into subscriptions,
7 or how they can relate to subscriptions for cable. Now,
8 let's say, there is a mother who watches devotedly, or
9 religiously watches In Touch with Charles Daly, which is
10 a one-hour religious program, and there is a father who
11 watches MacGyver reruns, a one-hour show, and there are
12 four children who watch a half-hour of G.I. Joe in the
13 afternoon every day.

14 Now, is there any -- well, let's just do the
15 computations quickly. For the four children, they are
16 watching two quarterhours each, so that's eight per day,
17 five days, is 40 quarterhours, correct?

18 A All right.

19 Q And the parents are each watching four
20 quarterhours of TV, four for Devotional -- In Touch -- and
21 four for MacGyver.

22 A All right.

23 Q Now, if we assume that the parent -- let's take
24 the mother in this case -- is subscribing to cable because
25 her preference is to receive this program, In Touch, and

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1 that she is the person who makes the decision, and she is
2 otherwise indifferent about the other programming, is that
3 preference in any way reflected in the Nielsen Study, in
4 your MPAA Study?

5 A The viewing -- her viewing of In Touch would be
6 reported.

7 Q Correct, but is her decision to subscribed based
8 on that program reflected anywhere in your study?

9 A No, just the fact that she viewed or did not view
10 that program.

11 Q And, in fact, in your study, because it doesn't
12 look at demographics or it doesn't report on demographics,
13 one couldn't tell who in the household views any particular
14 quarterhour, correct?

15 A All we know is that that program was viewed for
16 that period of time in that household.

17 Q And if the neighbor's house has exactly the same
18 situation, does exactly the same viewing, and has -- they
19 still like devotional programs, but they despise MacGyver
20 but select cable because of G.I. Joe -- let's say that --
21 and subscribe to cable because of G.I. Joe, that household
22 would look exactly the same in your study, wouldn't it, as
23 the house that --

24 A G.I. Joe would be credited with the same amount
25 of viewing as the viewing of In Touch.

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1 Q So, the study can make no -- you could have
2 completely opposite viewing preferences in terms of the
3 people who are making the decision in the house to
4 subscribe to cable, but households could report the same
5 viewing hours without regard to the decision to subscribe
6 to cable, correct?

7 A Well, the viewing hours indicates the viewing
8 preference.

9 Q Well, we've just said we have two households that
10 select cable for completely different reasons. There is
11 viewing in the household, but the cable subscription
12 decision is made by people with different preferences. So,
13 viewing hours don't equal subscription preference, does it?

14 A No, I don't agree with that at all. I think that
15 the extent to which each program is viewed indicates a
16 preference for that program on the part of that household.

17 Q It's a preference by a member of the household.

18 A That's correct.

19 Q But unless every member of the household, every
20 reporting member of the household, has an equal share
21 according to the volume of television they watch, the
22 quarterhours they watch, in the decision to subscribe to
23 cable or not to subscribe, then the viewing hours would not
24 equate with the decision to subscribe, would it, because
25 every one of the viewing hours, quarterhours, has an equal

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1 weight in your survey, don't they?

2 A Yes, each one is a vote by a cable household,
3 with respect to the programming they would prefer to watch.

4 Q And if a parent decides that -- if the person who
5 decides to subscribe to cable -- if the house is not a
6 complete democracy -- maybe that's the best way to say it -
7 - if the house is not a complete democracy and if somebody
8 makes a decision that in any way doesn't respect in equal
9 weight not only the preferences of all the individuals, but
10 the volume of TV that each person watches, then that
11 decision will not be accurately reflected by the viewing
12 hours they watch, will it?

13 A It merely would reflect the viewing preferences
14 of all the members of the household.

15 Q Your study merely reflects the viewing
16 preferences, not subscription preferences, of all the
17 members of the household.

18 A That's correct.

19 Q Well, just a few more questions. If you add up
20 all this, and now let's say we have 100,000 household hours
21 for MacGyver, 100,000 for In Touch, and 100,000 for G.I.
22 Joe, given that the households reflect viewing preferences
23 but not subscription preferences, isn't it also true that
24 when you add all that up, you're going to have the same
25 flaw that -- or characteristic that viewing preferences do

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1 not reflect subscription preferences?

2 A I don't under the subscription preferences thing.
3 I think you're referring to subscription preferences with
4 respect to the decision to obtain cable service or retain
5 cable service.

6 Q Correct.

7 A It's been our position that the extent to which
8 the cable system household views the programs which are not
9 available other than on cable, is an indication of the
10 reasons for subscribing to cable.

11 Q I understand that's your position, but what I'm
12 trying to demonstrate from our example with the household
13 is that the volume of TV viewing for each of the programs
14 may have no relationship to the aggregate decisions of all
15 those households to decide whether to subscribe to cable.

16 A All that we can do is -- from our data, from our
17 Special Study, is to assume that the extent to which the
18 people in that household choose to view programs is the
19 reason that they subscribe to the service.

20 Q Right, but unless that amount is equal to the -
21 - is reflected completely in the decision to subscribe or
22 not to subscribe, those two factors, viewing hours and
23 subscriptions, could not be assumed to be the same, could
24 they?

25 A I find it difficult because we have not purported

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1 to measure the extent to which a particular viewing of a
2 particular program is determinant in the decision to
3 subscribe or not to subscribe.

4 MR. CAMPANELLI: Thank you. No more questions,
5 Mr. Chairman.

6 CHAIRMAN AGUERO: Commissioner?

7 COMMISSIONER DAUB: No.

8 CHAIRMAN AGUERO: Commissioner?

9 COMMISSIONER ARGETSINGER: No.

10 CHAIRMAN AGUERO: I have a question. This
11 question may be irrelevant, but I have to ask this
12 question. If I have in my house a meter, when I insert in
13 my videocassette a film, it is registered in the
14 technicality issues, the film that I rent, or not?

15 THE WITNESS: Not at this time. The only way
16 that Nielsen, or anybody, could tell particularly the title
17 of that program, would be if somehow that videocassette
18 were encoded either at the time -- if it was a prerecorded
19 videocassette, at the time it was manufactured, or under
20 some sort of system where it would be automatically encoded
21 at the time it is recorded off-the-air or off some other
22 service.

23 CHAIRMAN AGUERO: Okay.

24 THE WITNESS: Otherwise, all that can be
25 determined is that the VCR was used in that household

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1 during a particular time.

2 CHAIRMAN AGUERO: In some daily data, do I have
3 to fill out in my form that I have for two hours or one
4 hour and a half, watched a movie with Linda Darnell and
5 Harrison and the others, or not?

6 THE WITNESS: On your diary --

7 CHAIRMAN AGUERO: Or do I leave that line blank,
8 or what should I do?

9 THE WITNESS: On your diary, you would enter it.

10 CHAIRMAN AGUERO: I have to do it.

11 THE WITNESS: Yes, you are asked to do that, but
12 a meter couldn't tell it, which was your first question.

13 CHAIRMAN AGUERO: And the second one, I would
14 have to fill out the form.

15 THE WITNESS: You would indicate the particular
16 programs that you viewed. Nielsen does --

17 CHAIRMAN AGUERO: How do you qualify that
18 particular rental film that I have in my home? It is not
19 a distant signal, of course.

20 THE WITNESS: Pardon me?

21 CHAIRMAN AGUERO: It is not a distant signal
22 film.

23 THE WITNESS: No, it is not a distant signal, and
24 we are not counting it. All the programs that we are
25 reporting in Program Suppliers Exhibit 1 are related to a

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1 particular broadcast station.

2 CHAIRMAN AGUERO: Yes, we know that.

3 Mr. Lane, redirect?

4 MR. LANE: Thank you, Mr. Chairman.

5 REDIRECT EXAMINATION

6 BY MR. LANE:

7 Q Mr. Cooper, would you turn to Devotional Exhibit
8 13-X, please?

9 A I have it, sir.

10 Q I'm going to hand you, just so you have them
11 readily available, NAB Exhibits 37 and 38-X. On 13-X, it
12 refers to the subscriber counts coming from Exhibit 37-X,
13 does it not, in Footnote 1?

14 A Yes, sir.

15 Q Is NAB Exhibit 37-X the list that you had at the
16 time that you made the sample selection?

17 A No, sir.

18 Q What was the list that you had at the time, is
19 that an exhibit in this case?

20 A That's 38-X.

21 Q Would you look on 38-X and tell me whether WHFT,
22 WKOI, WCLF, and then another one that was added during
23 cross-examination, WLTV, appear?

24 A I'm looking at the ones which were highlighted
25 in yellow particularly, in NAB Exhibit 38-X, and I don't

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1 see any of those stations in yellow.

2 Q And it's your understanding that all the ones in
3 yellow were the ones with more than 80,000 at the time,
4 that were not included in the sample, correct?

5 A Those are the ones that had over 80,000 in 1989-
6 1, according to the June, 1990 report.

7 Q But none of the stations except for WPCB, that
8 are shown on Devotional Exhibit 13-X, appeared as having
9 80,000 subscribers on the report when you made your sample
10 selection?

11 A None of them was on this list.

12 Q Now, earlier this morning, do you recall
13 Commissioner Daub asked you a question about KPLR?

14 A Yes, sir.

15 Q And KPLR appears, does it not, on Exhibit 38-X,
16 as having over 80,000 subscribers?

17 A It does.

18 Q And you decided, however, based on prior periods,
19 that that number was probably incorrect, and you did not
20 include it in the sample, is that correct?

21 A I concluded that it would not apply during 1989-
22 1 and '2.

23 Q Would you look on Exhibit 37-X, please, and tell
24 me if KPLR appears on that exhibit?

25 A It does not.

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1 Q And that exhibit, is it not, is the most recent
2 data of how many subscribers had available KPLR in the '89
3 period?

4 A As a full-time distant signal.

5 Q So, that means that KPLR did, in fact, have under
6 80,000 subscribers in '89?

7 A Yes, sir.

8 Q And so your judgment was correct with KPLR, is
9 that correct?

10 A That's correct.

11 Q You were also asked, were you not, about KPRC,
12 by Mr. Olson, do you recall that?

13 A Yes, I do.

14 Q And would you look on Exhibit 38-X, and does that
15 appear on that exhibit?

16 COMMISSIONER DAUB: If I'm not out of order here
17 --

18 MR. LANE: You're never out of order,
19 Commissioner.

20 COMMISSIONER DAUB: I'm getting old myself, and
21 I just don't want to lose thought here. Back on the KPLR,
22 I may have misunderstood you, but my question to Mr. Cooper
23 was when he was looking at previous years, the subscriber
24 numbers, when he made his judgment, so it is true in 1989
25 that the rate has dropped significantly -- in fact, below

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1 70,000 -- but all of the previous years reported here show
2 well over 80,000, correct?

3 THE WITNESS: That's correct.

4 COMMISSIONER DAUB: I don't quite understand in
5 your direct what you are referring here.

6 THE WITNESS: The indication, Commissioner, I
7 understood, was why we did not include KPLR inasmuch as its
8 level in prior periods was over 80,000, why we accepted the
9 68,275 as making KPLR ineligible under the objective
10 standard that we had decided to use.

11 What Mr. Lane is just deducing is the fact that
12 my judgment was correct, that the 68,000 figure was an
13 accurate count of the level of distant signal viewing for
14 that station in 1989 and, indeed, it was. It did not
15 qualify because, on the latest data, as of August, 1991,
16 where the full count did not qualify.

17 COMMISSIONER DAUB: Correct, but in your
18 statement earlier, you said that you looked at the past
19 subscriber rates, the numbers, when you make your decisions
20 as to which stations to include in your special survey,
21 which showed -- I guess the KRIV in point -- that you have
22 included that because in the past, prior to 1989, in fact,
23 that station did have over 80,000 subscribers.

24 THE WITNESS: It was my judgment that I felt,
25 Commissioner Daub, that the figure for 89-1 that I had in

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1 June, 1990, was accurate. And my judgment in terms of
2 believing that that number was accurate was confirmed when
3 the full data became available in August of this year. It
4 was a matter of judgment again, and I am relying upon the
5 experience level that I have spoken about before.

6 COMMISSIONER DAUB: So, are we talking about NAB
7 Exhibit 38-X to NAB Exhibit 37-X, to be taken in a
8 different year?

9 THE WITNESS: That's correct. The 37-X is based
10 upon August 12, 1991 data, and my best information that I
11 had in June of 1990, was the data on 38-X.

12 COMMISSIONER DAUB: Thank you.

13 MR. LANE: Commissioner Daub, if you look on the
14 top of Exhibit 38-X, in the column heading on the far
15 right, you will see it has a date June 19, 1990. That is
16 the date that that was printed and, yesterday, I asked Mr.
17 Stewart, on Exhibit 37-X -- he's here and he can correct
18 me -- he said that that came from a printout of August 12,
19 1991. So, that's the difference.

20 BY MR. LANE:

21 Q Mr. Cooper, yesterday you talked at length with
22 Mr. Garrett about the NSI meter services, do you recall
23 that?

24 A Yes, I did.

25 Q And you indicated that some services have meters

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1 in the NSI service, is that correct?

2 A That's correct.

3 Q Do those same areas also have NSI diaries?

4 A Yes, they do.

5 Q Do you recall being asked various questions about
6 the difference between the four-cycle and the six-cycle
7 from almost every counsel that cross-examined you?

8 A That's correct.

9 Q Does the number of quarterhours for all
10 categories increase when you go from four cycles to six
11 cycles?

12 A Yes. When you go from four to six cycles, I
13 think that you must keep in mind that it is not six cycles
14 for everyone. The jump is not from four to six, but four,
15 five and six. And for every category of programming, there
16 is an increase -- there should be an increase of
17 approximately 25 to 35 percent, because of the additional
18 periods that are covered in the six-cycle report.

19 Q And if we looked in Program Suppliers Exhibit 1
20 and we took the summary page for the four-cycle and the
21 six-cycle pages, we would see an increase between the four-
22 and six-cycle, in the number of quarterhours, is that
23 correct?

24 A Yes, you would, sir, and this is in the summary
25 pages which have been produced in evidence from Exhibit 1.

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1 The numbers in the four-cycle level, for all programs, for
2 example, is 890,386 and, for six cycles, it was 1,191,167.

3 Q And each of the categories separately increased
4 in the numbers?

5 A Every one of them, including Other.

6 Q Mr. Cooper, do you recall Mr. Garrett indicated
7 that the baseball season extends through October?

8 A He did.

9 Q Isn't it true that the only games played in
10 October are the league championship series and the World
11 Series?

12 A In October, that's true.

13 Q And are these network programs?

14 A Yes, they are.

15 Q In 1989, were those network programs?

16 A They were, and they are this year as well.

17 Q And it's true that network programs are not
18 compensated under Section 111, is it not?

19 A That's correct.

20 Q And notwithstanding that, is it not true that in
21 what you have termed, or what Nielsen terms, the October
22 Sweep, that there were additional quarterhours in viewing
23 picked up for baseball?

24 A That's correct -- very few, but there were some.

25 Q And I would refer you, Mr. Cooper, to page A-67

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1 of Exhibit MEK-8, which is the boilerplate. Mr. Cooper,
2 would you identify for the record what the dates were for
3 the 1989 October cycle?

4 A September 28 to October 26.

5 Q So that the additional games at the end of
6 September were the non-network baseball games that you
7 picked up in the six-cycle data?

8 A That's correct.

9 Q Mr. Cooper, Commissioner Argetsinger asked you
10 some questions about the differences between the viewing
11 on basketball and baseball. Can you provide some
12 information concerning the difference?

13 A Yes, sir. I have prepared a chart which
14 indicates the levels of viewing for Sports by type during
15 1989. This chart is a Sports by type four-cycle versus
16 six-cycle for the six Sports categories -- for the five
17 sports categories in Major Sports -- major league baseball,
18 National Basketball Association, National Hockey League,
19 NCAA basketball and NCAA football, and there is another
20 column for the total.

21 Q Could you tell us what the viewing was for
22 basketball versus the viewing for baseball?

23 A During four-cycle and six-cycle?

24 Q Yes.

25 A For major league baseball, the viewing during the

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1 four-cycle period was 55.275 percent of the Sports total.

2 Q What was it for the six-cycle?

3 A The six-cycle was 51.217 percent of the Sports
4 total.

5 Q And would you give us the same breakdown for
6 basketball, NBA basketball.

7 A NBA basketball, on the four-cycle basis, was
8 39.783 percent of the Major Sports total, but on the six-
9 cycle it was up to 41.384 percent.

10 Q For the basketball, NBA basketball games during
11 the six-cycle period relative to baseball?

12 A That's correct.

13 Q Mr. Cooper, I'd like to refer you to NAB Exhibit
14 35-X, which was titled Example Showing Computations of
15 Ratings for Distant Signal Programs, and it involved a
16 rating for WTBS and KMSP of Little House and a program on
17 WTBS called Good News and another one on KMSP called Prime
18 Time News.

19 A I have that.

20 Q And, Mr. Cooper, that exhibit shows, does it not,
21 that the rating for KMSP is higher than the rating for
22 WTBS, with regard to Little House on the Prairie, does it
23 not?

24 A Yes, it does.

25 Q Does that mean that the KMSP rating is worth more

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1 for Little House on the Prairie than the lower rating on
2 WTBS?

3 A No, certainly not. I think that you can see from
4 Exhibit 35-X that the 1.5 on WTBS is based upon 69,470,000
5 households whereas the 4.1 on KMSP is based, I would
6 assume, on 494,000 households. I don't believe that. I
7 must have misread this thing. Let me try it once again.

8 The 1.5 on WTBS relates to 1.5 percent of
9 37,544,139 households. The 4.1 for KMSP relates to 135,965
10 households, or just a few percent of the WTBS households.

11 MR. LANE: Those are all the questions -- I'm
12 sorry.

13 THE WITNESS: I would like to --

14 CHAIRMAN AGUERO: Commissioner?

15 MR. LANE: I may have some more questions.

16 THE WITNESS: The difference that I was
17 describing, Commissioners, was that the 1.5 on WTBS with
18 37 million households, is equivalent to viewing in 563,162
19 cable households. The 4.1 on KMSP, which has 135,965 total
20 distant signal households, is 5,574. In other words, the
21 WTBS total is a hundred times greater with a lower rating,
22 than the KMSP with four times the rating.

23 MR. LANE: Those are all the questions I have on
24 redirect.

25 CHAIRMAN AGUERO: Commissioner?

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1 COMMISSIONER DAUB: No.

2 CHAIRMAN AGUERO: Commissioner?

3 COMMISSIONER ARGETSINGER: No.

4 CHAIRMAN AGUERO: In baseball, the six-cycle
5 declined from 51.217 and then increased in the four-cycle
6 by 2.75 and, in basketball it is the other way around,
7 increased on the six-cycle and decreased on the four-cycle.
8 Can you give me the reason why it increased on the six-
9 cycle and, to my knowledge, in the six-cycle you have
10 basketball in January and February, and perhaps a little
11 bit in November, and in the four-cycle you have basketball
12 only in one month, in February.

13 THE WITNESS: That's correct, and possibly in
14 November.

15 CHAIRMAN AGUERO: But in six-cycle, you have it
16 in January and February. Can you give me the reason why
17 it increased in the six-cycle? Because you have it in
18 January, February and a little bit in November -- this is
19 the reason why basketball increased --

20 THE WITNESS: Yes, because we are covering more
21 of the basketball season than we could with the four-cycle
22 report. The other sports, which are not -- don't have the
23 advantage of baseball where two of the four cycles are
24 right in the heart of the baseball season, baseball is
25 advantaged by the four-cycle count. However, if we do --

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1 what our really ultimate aim is, is to cover the full
2 year, cover more periods, we cover more of the seasons for
3 these other sports, including National Hockey, college
4 basketball, college football, and National Basketball
5 Association.

6 CHAIRMAN AGUERO: Thank you very much, Mr.
7 Cooper, and this concludes the Program Suppliers direct
8 case.

9 (Whereupon, the witness was excused.)

10 Thank you, everyone, for coming before us, ladies
11 and gentlemen, and we will return on Tuesday, September
12 24th, at 10:00 a.m., with the Joint Sports Claimants.

13 (Whereupon, at 12:55 p.m., the hearing was
14 adjourned, to reconvene Tuesday, September 24, 1991, at
15 10:00 a.m., in the same room.)

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C E R T I F I C A T E

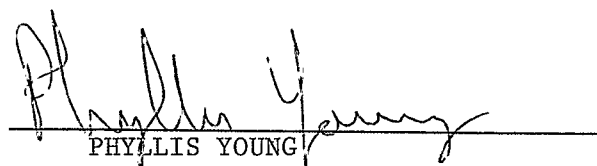
This is to certify that the foregoing transcript
in the matter of: COPYRIGHT ROYALTY TRIBUNAL - HEARING IN THE
MATTER OF THE 1989 CABLE COPYRIGHT ROYALTY
DISTRIBUTION PROCEEDING (DOCKET NO. CRT91-2-89CD)

Before: MARIO F. AGUERO, CHAIRMAN

Date: SEPTEMBER 20, 1991

Place: ROOM 921
1825 CONNECTICUT AVENUE, N.W.
WASHINGTON, D.C.

represents the full and complete proceedings of the
aforementioned matter, as reported and reduced to type-
writing.


PHYLLIS YOUNG

NEAL R. GROSS
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----- X

In the Matter of: :

1983 CABLE COPYRIGHT : CRT 84-1:83-CD

ROYALTY DISTRIBUTION :

----- X

(This volume contains pages 990 through 1151)

Room 458
1111 20th Street, Northwest
Washington, D. C.

Tuesday, July 2, 1985

The hearing in the above-entitle matter re-
convened at 10:00 a.m., pursuant to adjournment.

BEFORE:

EDDIE RAY	Chairman
MARIO R. AGUERO	Commissioner
ROBERT CASSLER	General Counsel

1 APPEARANCES:2 MPAA:

3 ARTHUR SCHEINER, ESQ.
4 DENNIS LANE, ESQ.
5 LESLIE SWACKHAMMER, ESQ.
6 Wilner & Scheiner
7 Suite 300
8 1200 New Hampshire Avenue, N.W.
9 Washington, D. C.

10 NAB:

11 VICTOR FERRALL, ESQ.
12 JEFFREY S. LINDER, ESQ.
13 JOHN STEWART, ESQ.
14 ROBERT M. HALPERIN, ESQ.
15 Crowell & Moring
16 1100 Connecticut Avenue, N.W.
17 Washington, D. C.

18 Joint Sports Interests:

19 DAVID LLOYD, ESQ.
20 ROBERT GARRETT, ESQ.
21 Arnold & Porter
22 1200 New Hampshire Avenue, N.W.
23 Washington, D. C.

24 ASCAP:

25 I. FRED KOENIGSBERG, ESQ.
 One Lincoln Plaza
 New York, New York

BMI:

 CHARLES T. DUNCAN, ESQ.
 MICHAEL W. FABER, ESQ.
 Reid & Priest
 1111 19th Street, N.W.
 Washington, D. C.

1: APPEARANCES:2: Devotional: Old Time Gospel Hour:

3: JOHN H. MIDLEN, JR., ESQ.
1050 Wisconsin Avenue, N.W.
4: Washington, D. C.

5: CBN:

6: BARRY GODFREY, ESQ.
Fisher, Wayland, Cooper & Leader
7: 3525 Davenport Street, N.W.
Washington, D. C.

8: Canadian:

9: DOUGLAS THOMPSON, ESQ.
10: KENDALL SATTERFIELD, ESQ.
Finkelstein, Thompson & Levenson
11: 2828 Pennsylvania Avenue, N.W.
Washington, D. C.

12: NPR:

13: DAVID O. STEWART, ESQ.
14: Miller, Cassidy, Larroca & Lewin
Suite 500
15: 2555 M Street, N.W.
Washington, D. C.

16:

17:

18:

19:

20:

21:

22:

23:

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25:

C O N T E N T S

<u>WITNESS</u>	<u>DIRECT</u>	<u>CROSS</u>	<u>REDIRECT</u>	<u>VOIR DIRE</u>
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RICHARD LOFTUS	994	- -	1085	1058
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By Mr. Ferrall	- -	1036 1059	- -	996
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By Mr. Midlen	- -	1065	- -	1014
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By Mr. Satterfield	- -	1069	- -	- -
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By Mr. David Stewart	-	1071	- -	- -
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ALLEN R. COOPER

By Mr. Ferrall (resumed	1097	- -	- -
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<u>EXHIBITS</u>	<u>IDENTIFIED</u>
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PR No. 230-X Ann. CATV Radio Service	1082
--------------------------------------	------

NAB No. 21-X Available Syndicated Programming Service	1100
--	------

NAB No. 22-X Average '83 full-time Distant Cable Subscribers	1144
---	------

1 it is self-evident that 33 million -- excuse me -- 34.2
2 million is higher than 33.8 million. If that's what you
3 want, then I think the answer is self-evident.

4 CHAIRMAN RAY: Well, I think the question posed
5 to Mr. Cooper -- well, the objection is overruled.

6 BY MR. FERRALL:

7 Q Mr. Cooper, we've agreed that Scooby-Doo lost
8 more protectability, or more potential protection, more
9 areas in which protection could have been sought for it
10 than did Bozo, when the syndicated exclusivity rules
11 were lifted, is that correct?

12 A I think we are in agreement on that, yes.

13 Q We've also agreed that viewing is an appropriate
14 measure of harm, benefit and marketplace value?

15 A I will agree with that, as far as syndicated
16 programs are concerned.

17 Q But not as far as other programming is concerned?

18 A That's correct.

19 Q You do not agree with it as far as other pro-
20 gramming is concerned?

21 A I do not agree with it with respect to other
22 categories of programming.

23 Q Okay. Fine. Thank you. Now -- and we've
24 agreed that on the basis of viewership, the value as
25 shown by your Exhibit 21, Bozo's Circus is greater than

ROAD TEST:

JEEP CH

PTV EXHIBIT 3-X

ISUZU RODEO LS, MITSUBISHI MONTERO RS

SEPT.
'91

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Consumer Reports

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TV CHANNELS

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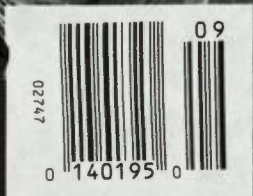
BATHROOM TISSUES

TELEVISION

How you rate the channels
How you rate the cable systems



NOTICE OF ANNUAL MEETING OF
CONSUMERS UNION OF U.S., INC.,
PAGE 573.



TELEVISION



THE CHANNELS.

What TV fare satisfies best? Readers rate cable channels and pay channels against PBS and the big networks. Starts on facing page.

THE SERVICE.

Readers are less satisfied with their local cable system than with any other type of service we've rated. For the reasons why, turn to page 581.

THE NEW WORLD OF TV.

Are cable-system operators too big and too powerful? If you think the answers don't affect what you pay and what you see, think again. See page 583.

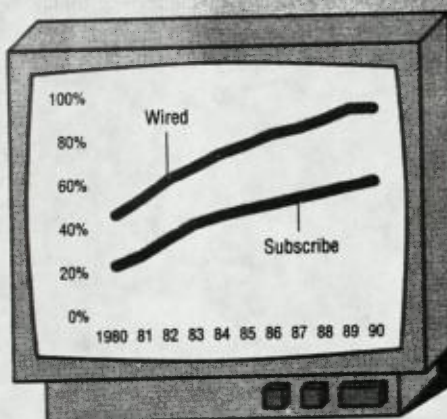
In more than 200,000 responses to our 1990 Annual Questionnaire and a smaller survey done last spring, readers told us about their experiences with cable TV service and their opinion of the programming it delivers. Our readers are particularly knowledgeable on the

subject: 75 percent subscribe to a cable service, compared with 60 percent for the country as a whole. About one-third of those readers have been cable subscribers longer than five years. About one-fourth have subscribed to more than one cable system.

HOW CABLE HAS CHANGED TV VIEWING

WIRED FOR CABLE TV...

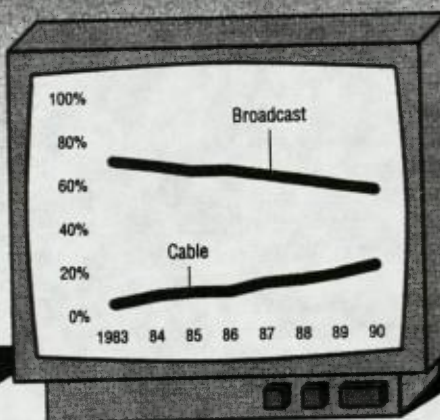
U.S. homes wired for cable and those actually subscribing



Source: Cable TV Investor, A.C. Nielsen data.

AND WATCHING MORE OF IT...

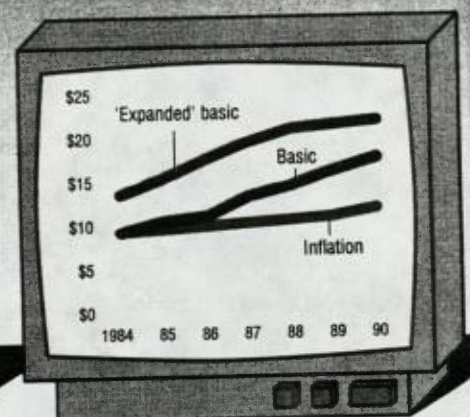
Broadcast and cable networks' average share of TV audience



Source: Cabletelevision Advertising Bureau.

BUT PAYING MORE, TOO...

Average U.S. monthly cable rates compared with the Consumer-Price Index



Source: Paul Kagan Assoc., Dept. of Labor.

THE CHANNELS

Back in the days when a dish was used to serve food, not to pluck TV signals from the sky, cable TV merely relayed broadcast programming to places that distance or topography had cut off from reception. Today, the dishes at cable systems' "headends" can receive 60 national and 40 regional networks in addition to *NBC*, *CBS*, *ABC*, *PBS*, and local broadcast stations, both UHF and VHF.

Most people don't need cable to get TV, though many relish the improved reception. The main reason our readers who get cable say they're willing to pay close to \$300 a year, on average: the programming. Three-quarters of the readers said they want the basic cable channels—that is, the ones that come in a monthly service package and that typically carry commercials. About half agreed that "cable shows are so good that I'd never consider dropping cable."

But our survey also turned up echoes of the familiar gripe about TV—there's nothing to watch. One-third of the readers with cable complained about insufficient variety—too many of the channels look alike.

At the same time, readers want

more. One-third want specific channels that their system doesn't offer. One-sixth complained that the system they're stuck with doesn't have enough channels.

Coming changes in technology will permit cable companies to offer hundred of channels. Given the history of cable TV and broadcast TV, one cannot be optimistic that more channels will in fact increase the variety or quality of the programming. But greater capacity will give cable a second chance at missed opportunities.

One coming change will be in the cable itself. Systems are starting to replace low-capacity coaxial cable with optical fiber—a cable scarcely thicker than a pencil that can hold dozens of strands, each able to carry 60 channels on a beam of laser light.

Another change is in how the signals will be carried on the cable. Digital compression shoehorns four or eight channels into the space that one channel now occupies. With compression, the typical 35-channel system could grow to 280 channels, the deluxe 150-channel system to 600 or 1200 channels.

With all that capacity, the channel lineup of tomorrow's cable system may look even more like a magazine rack than it does now, with a few general publications and many specialized ones. Consider some channels recently started up or on drawing boards: *Celticvision*, with all-Irish programming; *Court TV*, with cameras rolling in the courts; the *Cowboy Channel*, for everything Western; the *Sci-Fi Channel*, to tap the "Trekkies" market; and a four-in-one channel for media junkies, showing the three networks and *Cable News Network* simultaneously on a quartered screen.

Additional capacity will allow a cable network to offer multiple versions of itself. HBO is now testing a three-channel scheme in Kansas, Wisconsin, and Texas that offers its customers three sets of programs for its usual price, tripling HBO's chance of grabbing audience share. Other channels may be offered in more than one language,

or in a commercial-free edition for an extra fee.

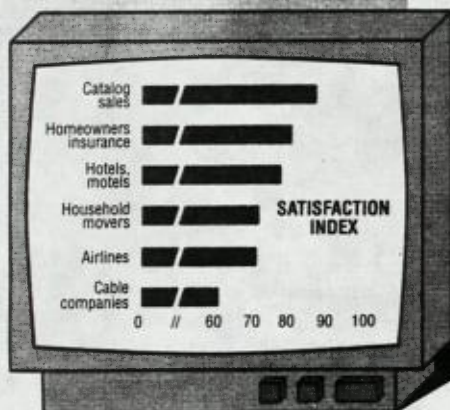
With more channels, pay-per-view programming, now available to relatively few customers, would probably expand. PPV lets viewers call the cable company to order recent movies, concerts, and sporting events, for charges ranging from about \$5 to \$40. Next summer NBC plans to show the 1992 Olympics on three pay-per-view channels in addition to its regular broadcast.

PPV aims to wrest business from the \$15- to \$20-billion video-rental market. A system with a couple of hundred channels would have enough room to devote 30, 40, or more of them to PPV movies, with starting times for each movie scheduled at 15-minute intervals. Another PPV arrangement, currently being tested by Tele-Communications

There are more channels, and more coming as systems rewire to carry extra programming. Readers rate 44 channels.

AND NOT EXACTLY HAPPY*

Here's reader satisfaction with cable and various other services

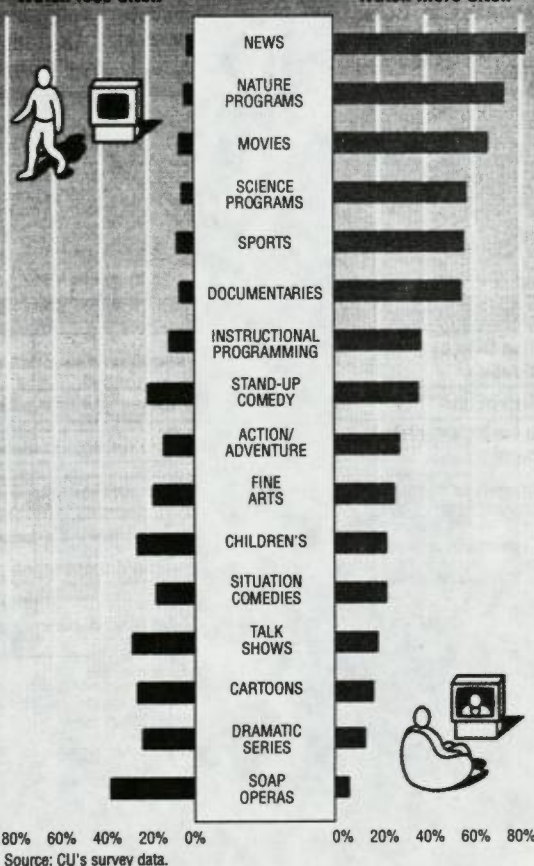


*At least according to readers responding to CU's survey.

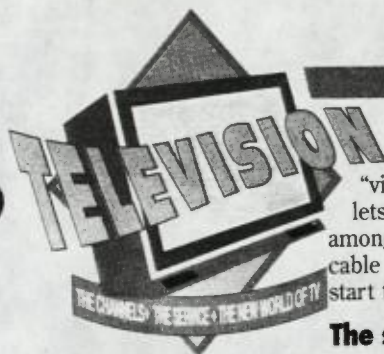
HOW CABLE HAS CHANGED VIEWING HABITS

Watch less often

Watch more often



Source: CU's survey data.



Inc., the nation's biggest cable operator: "video on demand," which lets customers order from among hundreds of titles in a cable system's library and start the show any time.

The state of the art

The line between broadcast programming and cable programming continues to blur. Cable has captured popular shows and sports from broadcast TV. In Eureka, Calif., the cable system outbid local stations for syndicated shows such as "Jeopardy" and "Oprah Winfrey." Most of the games played by New York City's two baseball teams, the Yankees and the Mets, can be seen only over cable. When *ESPN*, a cable sports network, televises baseball and football, it often blacks

out the local station's broadcast.

Cable channels, once just pipelines, increasingly produce original programming, too. Seven cable channels made more than 70 feature films last year. *TNT*, Ted Turner's newest network, presents about two a month. The number of made-for-cable series grows every season.

Cable channels, like independent broadcast channels, are also littered with network hand-me-downs, everything from "Dobie Gillis" and "My Three Sons" to "Moonlighting" and "Miami Vice."

Here's a rundown on the kinds of channels:

Movies. Most movies reach the video store six months after their theatrical release. A month or two later they're shown on cable on a pay-per-view basis. Then they go to *HBO*, *Showtime*, and the other pay-

movie channels. In addition, *HBO* and *Showtime* air original movies and series, pop concerts, comedy, and sports such as tennis and boxing. With much the same product, *HBO* and *Showtime* try to achieve distinctiveness—and attract customers—by obtaining exclusive rights from the various motion picture studios. "Presumed Innocent," from Warner, and "Ghost," from Paramount, will turn up only on *HBO*. "Dances with Wolves," from Orion, and "Postcards from the Edge," from Columbia, will appear only on *Showtime*. (*HBO* has also produced consumer-information specials in cooperation with CU.)

HBO and *Showtime* each have a sibling channel, *Cinemax* and *The Movie Channel*, that concentrates more on movies. *American Movie Classics*—sometimes a pay channel,

RATINGS

TV channels

Listed by groups; within groups, listed in order of overall quality score based on responses to CU's 1990 Annual Questionnaire. Differences of 2 points or more in score are meaningful.

1 Channel. Channels were rated by at least 4400 of their current and former subscribers. Most were rated by 25,000 or more. The three big broadcast-TV networks—ABC, CBS, NBC—were rated by nearly 180,000.

2 Type. The channel's typical programming, as explained in the accompanying

report.

3 Overall score. Readers rated a channel's overall program quality on a six-point scale, from excellent to very poor. Had everyone judged a channel excellent, its score would have been 100; had everyone judged it very poor, its score would have been 0. These results pertain only to con-

1 Channel	2 Type	3 Overall score	4 Readers' rating	5 Comments
Pay/Premium Channels				
The Disney Channel	Children	74		D,W,C
Showtime	Movie	61		—
Home Box Office (HBO)	Movie	61		—
Cinemax	Movie	60		O
The Movie Channel	Movie	60		—
Basic channels				
The Discovery Channel	Special-audience	77		D
Cable News Network (CNN)	News and weather	76		D
PBS	Broadcast network	76		D
CNN Headline News	News and weather	74		D
ESPN	Sports	70		D

1 Channel	2 Type	3 Overall score	4 Readers' rating	5 Comments
Arts & Entertainment	Cultural	69		D
The Weather Channel	News and weather	66		D
American Movie Classics (AMC)	Movie	66		D,W
Turner Network TV (TNT)	General-audience	65		—
The Learning Channel	Special-audience	64		D,W
Financial News Network (FNN)	News and weather	63		D,O
The Family Channel	General audience	62		W
WTBS/TBS	Super-station	62		—
Nickelodeon	Children	62		W,Y,C
WGN	Super-station	61		—
Lifetime	Special audience	61		W

more often a basic channel—features classics. A recent addition to the ranks is *Encore*, created by Tele-Communications Inc. to be “the Wal-Mart of pay channels.” Priced at \$1 to \$5 a month, *Encore* airs films from the '60s, '70s, and '80s.

Cultural. *Bravo*, a pay channel in a few places, a basic channel elsewhere, bills itself as “cable’s culture channel.” On any given night, viewers might see an opera, a chamber-music concert, or a repertory-house film. *Arts & Entertainment*, a basic channel, offers a similar mix, along with documentaries and shows imported from British TV.

Sports. A programming staple, sports are carried on many channels—the networks, local stations, superstations like *TBS*, and generalists like *USA Network*. Sports is *ESPN*’s mainstay. It has all the main-

stream sports, plus things like truck pulls, waterskiing competitions, and chainsaw contests.

Children. *The Disney Channel* shows all the favorites from the Disney Studios, along with original films, classic films with family appeal, new features, and series. *Nickelodeon* and its nighttime version, *Nick at Nite*, offer vintage reruns, talk, cartoons, and game shows aimed at kids.

Music. *MTV*’s staple is the rock video. It also airs concerts, quirky game shows, and various music-related programs. Its cousin, *VH-1*, has a softer playlist (less rap and heavy metal), one that’s designed for an audience not quite as youthful. *The Nashville Network* and *Country Music TV* feature country and western.

News and weather. *Cable News*

Network has set the standard for round-the-clock coverage. It also presents talk shows and other features. Its sidekick, *CNN Headline News*, takes you “around the world in 30 minutes,” with fast-paced updates each half-hour. *Financial News Network* pounds the business beat; it was recently merged into *CNBC* (the *Consumer News and Business Channel*), owned by NBC. *The Weather Channel* combines national and local forecasting.

General audience. These channels go for the broadest appeal, with series, movies, and sports. Included are Ted Turner’s *TNT*, *USA Network*, and *The Family Channel*, which also carries some religious programming.

Special audience. *Lifetime* has targeted women as its audience—with movies, shows on health, fit-

Spice of life?
Three of four readers agreed with this sentiment: Given all the channels, there’s still often nothing to watch.

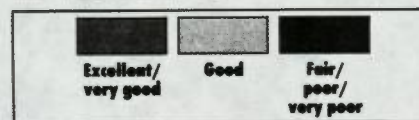
SUMER REPORTS readers, whose viewing habits may differ from those of Americans in general.

4 Readers’ rating. A percentage breakdown of how readers rated channels on the scale of excellent to very poor.

5 Comments. D = at least one-fourth of a channel’s viewers called the programming

“different, unique, or distinctive” from that on other channels. W = women rated the channel significantly higher than did men. (Men rated no channel significantly higher than did women.) O = older readers (45 years or older) rated the channel higher than did younger readers. Y = younger readers (18 to 44) gave higher ratings. C =

60 percent or more of the respondents who have children at home called the channel a favorite of their youngsters.



1 Channel	2 Type	3 Overall score	4 Readers' rating	5 Comments
USA Network	General audience	60		—
C-SPAN	Public affairs	59		D,O
Nick at Nite	Children	59		Y
Bravo	Cultural	58		D,W
NBC	Broadcast network	57		—
The Nostalgia Channel	Special-audience	57		W
FNN: Score	Sports	57		—
WPIX	Superstation	56		—
The Travel Channel	Special-audience	56		D,W
WWOR	Superstation	56		—
The Nashville Network (TNN)	Music	56		O
ABC	Broadcast network	56		W

1 Channel	2 Type	3 Overall score	4 Readers' rating	5 Comments
CNBC	News and weather	56		O
Fox Network	Broadcast network	55		Y
VH-1	Music	54		W,Y
Country Music Television (CMT)	Music	53		W,O
CBS	Broadcast network	53		W
Family Guide Network	Special-audience	52		W
FamilyNet	General-audience	51		W
ACTS Satellite Network	General-audience	50		—
Movietime	Movies	48		—
MTV	Music	40		Y
Black Entertainment Television	Special-audience	39		W

TELEVISION

THE CHANNELS • THE SERVICE • THE NEW WORLD OF TV

ness, and family, and series like "The Days and Nights of Molly Dodd." *The Discovery Channel's* forte is science and nature documentaries, with a dash of adventure. *The Learning Channel* sets its sights on students of all stripes, covering a range of courses from basic reading to career skills. *Black Enter-*

tainment Television offers its audience music from gospel to rap, plus news, talk, and other programming.

Superstations. They're local broadcast stations, with the usual mix of reruns, movies, and local sports and news, now seen in homes everywhere, thanks to cable. Best known: *TBS*, which is *WTBS*, channel 17, in Atlanta. Other supers:

Chicago's *WGN*, New York's *WPIX* and New Jersey's *WWOR*.

Public affairs. *C-SPAN* airs Congressional hearings, press conferences, panel discussions, and call-in shows. Many systems also include public-access channels, which televise meetings and area events like Little League games, festivals, and parades.

Home shopping. Two channels devote themselves to nonstop selling, as the box at left details.

Readers' picks

Our Annual Questionnaire asked subscribers to rate, on a scale of excellent to very poor, the quality of the programming shown on the three big broadcast networks, *PBS*, *Fox*, and more than three dozen basic and pay cable channels. We had at least 25,000 responses for most cable channels and well over 100,000 for a few. Practically everyone—almost 180,000 readers—judged the big networks.

The top-rated channels were *The Discovery Channel*, *CNN*, *PBS*, *CNN Headline News*, and *The Disney Channel*. About two-thirds of our readers called them excellent or very good. At least one-fourth called their programming "distinctive."

The commercial broadcast networks—*NBC*, *ABC*, *CBS*, and *Fox*—landed in the lower half of the list, among such offerings as *The Nostalgia Channel*, *The Travel Channel*, and superstations *WPIX* and *WWOR*. Less than one-third of viewers judged the networks excellent or very good. By a slight margin, *CBS* rated lowest of the big three, a position that parallels its Nielsen standings in recent years.

TNT was judged the top general-audience channel. It may have won that rating because it shares with its sibling, *TBS*, the 3300-film *MGM* library, replete with classics such as "Gone With the Wind," "Casablanca," and "King Kong."

Our readers showed only mild enthusiasm for the four big pay-movie channels—*HBO*, *Cinemax*, *Showtime*, and *The Movie Channel*. One-third of viewers judged the four excellent or very good, half as many as commended the top channels. About half our readers subscribe to premium, pay-extra channels, and their lack of enthusiasm won't surprise the industry. The growth of such channels has been described as flat lately. Among our readers, more dropped these channels than added them in the past year.

CUBIC ZIRCONIUM, ANYONE?

SHOPPING BY TV

TV viewers like home-shopping channels well enough to have spent \$2.3-billion last year on trinkets ranging from 14-karat gold chains and cubic zirconium jewelry to porcelain figurines, sportswear, and camcorders. Cable operators like the extra money the channels bring in—typically, a 5 percent cut of sales from their area.

The two main rivals in this arena are *HSN*, or *The Home Shopping Network*, which runs the "Home Shopping Club" on both regular and cable TV; and *QVC*, a cable network whose initials stand for "quality, value, and convenience."

Both *HSN* and *QVC* feature personable hosts who push the merchandise, take viewer testimonials on the air, and coax everyone to buy and buy. Celebrity guests spice up the action from time to time—Vanna White and Connie Stevens have been on *HSN*, Joan Rivers and Carol Channing on *QVC*. Callers can also play games and

spin wheels for bonus shopping cash.

The *HSN* style is the hard-sell. If you want something, you must buy while it's on the air. The pace is frenzied, with hosts sometimes slashing prices moment by moment, auctioneer-style, and a countdown timer on screen to encourage viewers to order with their push-button phone.

The *QVC* style is softer. You can buy anytime. *QVC* sends its customers a printed schedule of when different types of merchandise will be sold and encourages viewers to tape segments if they cannot watch them live.

About one-fourth of *CONSUMER REPORTS* readers have watched a home-shopping channel, according to our survey, and one-third of those—8 percent of our readers overall—had bought something in the year prior to the survey. Their main complaint: the quality of the goods. Nearly one in five said the merchandise had looked better on TV than in person. Other problems: getting through on the phone, out-of-stock merchandise, and items that arrived damaged or broken. Readers had fewer problems with *QVC* than with *HSN*. The bar graphs at left give specifics.

Two things we'd advise for anyone shopping by cable:

■ Pay attention to shipping and handling charges, which can be significant. *QVC* lists them on screen; *HSN* makes you ask.

■ Take those "regular prices" or "list prices" displayed on air with a boulder of salt. The Federal Trade Commission told us it is investigating how the industry arrives at the prices used for comparison. Both shopping channels say they use retail surveys or "traditional" mark-ups when a manufacturer doesn't specifically give a list price. Two years ago, the New York State Attorney General checked on 150 items *HSN* was offering and found that prices had been adequately documented for less than one-third. Under the state's settlement with *HSN*, the channel admitted no wrongdoing but agreed to document more fully the price data it uses.

HOME-SHOPPING PROBLEMS

Reported by readers who bought from channels in past year.



CONSUMER REPORTS CABLE SUBSCRIBER SURVEY -- 1990Summary of Results

(at least 4,400 responses per service)

1.	Discovery Channel	77
2.	PBS Cable News Network	76 (tie)
4.	Disney Channel (pay) CNN Headline News	74 (tie)
6.	ESPN	70
7.	Arts & Entertainment	69
8.	Weather Channel American Movie Classics	66 (tie)
10.	Turner Network Television (TNT)	65
11.	The Learning Channel	64
12.	Financial News Network	63
13.	WTBS Family Channel Nickelodeon	62 (tie)
16.	WGN Lifetime Showtime (pay) HBO (pay)	61 (tie)
20.	Cinemax (pay) The Movie Channel (pay) USA Network	60 (tie)
23.	C-SPAN Nick at Night	59 (tie)
25.	Bravo	58
26.	NBC Nostalgia Channel FNN: Score	57 (tie)

29.	WPIX The Travel Channel WWOR The Nashville Network ABC CNBC	56 (tie)
35.	Fox Network	55
36.	VH-1	54
37.	Country Music Television CBS	53 (tie)
39.	Family Guide Network	52
40.	FamilyNet	51
41.	ACTS Satellite Network	50
42.	Movietime	48
43.	MTV	40
44.	Black Entertainment Television	38

Cable Network Prime Time Ratings Among Subscribers and Penetration Trends

	Prime Time AA Rating (Within Subscribing Households)*					Household Penetration (as %s)**				
	85-86	86-87	87-88	88-89	89-90	85-86	86-87	87-88	88-89	89-90
Total Cable	—	—	—	—	—	49	51	56	58	61
Pay Cable	—	—	—	—	—	27	30	31	31	29
HBO	9.2	8.8	8.8	8.4	7.9	20	23	23	23	22
WTBS	2.5	2.5	2.7	2.4	2.2	43	48	52	55	59
A&E Night	0.5	0.5	0.6	0.6	0.7	24	32	39	44	51
BET	—	0.5	0.5	0.5	0.5	—	18	23	27	31
CNN	1.1	1.2	1.0	1.1	1.2	40	47	53	57	61
Discovery	—	1.0	0.8	0.8	0.9	—	26	39	49	56
ESPN	1.5	1.5	1.8	1.8	2.1	43	49	54	58	61
Family Network	0.9	0.9	0.6	0.8	0.8	37	41	47	51	55
FNN	—	—	—	—	0.1	—	—	34	35	38
HLN	0.5	0.4	0.4	0.4	0.4	23	31	37	42	48
Lifetime	0.6	0.6	0.8	1.0	1.0	30	38	45	49	54
MTV	0.7	0.7	0.7	0.8	0.7	34	42	48	52	54
Nick at Night	—	0.7	0.8	0.9	0.9	27	36	42	43	46
The Nashville Network	1.3	1.1	1.2	1.0	1.0	31	40	47	51	53
The Weather Channel	0.3	0.2	0.3	0.2	0.2	25	33	40	44	49
TNT	—	—	—	1.4	1.6	—	—	—	35	53
USA Network	1.4	1.5	1.6	2.1	2.3	38	45	51	54	58
VH-1	—	0.4	0.4	0.3	0.2	16	25	32	36	42

*AA Rating based only on homes that could receive each service.

**Based on season ending penetration.

Source: Nielsen's Cable Activity Report

PTV Exhibit 7-X

**CUMULATIVE DISTANT SUBSCRIBER INCIDENTS
INCLUDED IN 1989 NIELSEN SPECIAL STUDY**

U.S. *INDEPENDENT* TV STATIONS

CY 1989: COMMERCIAL TV STATIONS (independent, non-network) included by
 Nielsen in study for MPAA (list: P.S.Exhibit ARC-6)--
 ranked by AVERAGE NUMBER OF SUBSCRIBERS, column f [= (d+e)/2].
 Source of data: Thomas Larson/Cable Data Corp. printouts of 11 & 12-Aug-1991.

PBS
 12-SEP-1991

a.	b.	c.	d.	e.	f.	g.	h.
---	---	---	---	---	---	---	---
			1989-1	1989-2	C.Y.1989:		
R	T	CALL	distant	distant	AVG.#OF DIST	= %	CUMULATIVE
A	Y	SIGN	full-time	full-time	-ANT FORM 3	(f divided	PERCENT-
N	P	STATION	form 3	form 3	FULL-TIME	by sum of	AGE OF
K	E		subscribers	subscribers	SUBSCRIBERS	all f)	TOTAL
---	---	---	-----	-----	-----	-----	-----
1	I	WTBS	36,439,159	37,544,139	36,991,649.0	38.22%	38.22%
2	I	WGN	17,025,812	17,739,098	17,382,455.0	17.96%	56.18%
3	I	WWOR	12,704,202	13,063,774	12,883,988.0	13.31%	69.50%
4	I	WPIX	4,398,398	4,437,284	4,417,841.0	4.56%	74.06%
5	I	WSBK	2,685,567	2,692,056	2,688,811.5	2.78%	76.84%
6	I	KTLA	1,198,812	1,205,195	1,202,003.5	1.24%	78.08%
7	I	WTFX	1,091,437	1,105,215	1,098,326.0	1.13%	79.22%
8	I	KTTV	1,053,880	1,052,421	1,053,150.5	1.09%	80.31%
9	I	KTXL	1,026,326	981,576	1,003,951.0	1.04%	81.34%
10	I	KTVU	729,460	751,928	740,694.0	0.77%	82.11%
11	I	KTVT	733,024	729,517	731,270.5	0.76%	82.86%
12	I	WTTG	709,826	646,854	678,340.0	0.70%	83.57%
13	I	WNYW	633,447	639,835	636,641.0	0.66%	84.22%
14	I	WBFF	597,820	611,872	604,846.0	0.62%	84.85%
15	I	WPHL	596,735	589,013	592,874.0	0.61%	85.46%
16	I	WUAB	543,547	553,008	548,277.5	0.57%	86.03%
17	I	WKBD	535,432	550,825	543,128.5	0.56%	86.59%
18	I	WDCA	530,548	545,658	538,103.0	0.56%	87.15%
19	I	KVOS	434,312	477,730	456,021.0	0.47%	87.62%
20	I	WLVI	431,584	447,608	439,596.0	0.45%	88.07%
21	I	KBHK	422,646	429,020	425,833.0	0.44%	88.51%
22	I	KICU	342,772	354,253	348,512.5	0.36%	88.87%
23	I	WFLD	293,105	313,115	303,110.0	0.31%	89.18%
24	I	WXIX	266,161	274,328	270,244.5	0.28%	89.46%
25	I	KCAL	258,115	267,403	262,759.0	0.27%	89.73%
26	I	KSTW	242,789	245,935	244,362.0	0.25%	89.99%
27	I	KXTX	233,123	245,039	239,081.0	0.25%	90.23%
28	I	KWGN	240,369	233,340	236,854.5	0.24%	90.48%
29	I	WGNX	210,889	217,515	214,202.0	0.22%	90.70%

CY 1989: COMMERCIAL TV STATIONS (independent, non-network) included by Nielsen in study for MPAA (list: P.S.Exhibit ARC-6)-- ranked by AVERAGE NUMBER OF SUBSCRIBERS, column f [= (d+e)/2]. Source of data: Thomas Larson/Cable Data Corp. printouts of 11 & 12-Aug-1991.

PBS
12-SEP-1991

a.	b.	c.	d.	e.	f.	g.	h.
			1989-1	1989-2	C.Y.1989:		
R	T	CALL	distant	distant	AVG.#OF DIST	= %	CUMULATIVE
A	Y	SIGN	full-time	full-time	-ANT FORM 3	(f divided	PERCENT-
N	P	OF	form 3	form 3	FULL-TIME	by sum of	AGE OF
K	E	STATION	subscribers	subscribers	SUBSCRIBERS	all f)	TOTAL
30	I	WPGH	213,293	214,450	213,871.5	0.22%	90.92%
31	I	WTTV	276,189	142,160	209,174.5	0.22%	91.14%
32	I	WNJU	216,791	198,808	207,799.5	0.21%	91.35%
33	I	WFXT	205,656	209,252	207,454.0	0.21%	91.57%
34	I	KSHB	198,090	209,347	203,718.5	0.21%	91.78%
35	I	KCOP	203,792	191,224	197,508.0	0.20%	91.98%
36	I	KFCB	192,323	198,515	195,419.0	0.20%	92.18%
37	I	KPTV	195,171	181,672	188,421.5	0.19%	92.38%
38	I	WCFC	158,947	199,448	179,197.5	0.19%	92.56%
39	I	KTSF	178,813	172,849	175,831.0	0.18%	92.74%
40	I	WTXX	183,285	161,437	172,361.0	0.18%	92.92%
41	I	WGBS	164,430	172,735	168,582.5	0.17%	93.10%
42	I	KMSP	187,933	135,965	161,949.0	0.17%	93.26%
43	I	KDOC	143,899	145,855	144,877.0	0.15%	93.41%
44	I	KOFY	137,498	129,104	133,301.0	0.14%	93.55%
45	I	KMEX	125,366	128,438	126,902.0	0.13%	93.68%
46	I	KTXH	129,004	110,174	119,589.0	0.12%	93.81%
47	I	WCCB	113,601	123,001	118,301.0	0.12%	93.93%
48	I	WGNO	122,022	105,328	113,675.0	0.12%	94.05%
49	I	WTOG	104,725	121,685	113,205.0	0.12%	94.16%
50	I	WPTT	105,573	90,837	98,205.0	0.10%	94.26%
51	I	WXTV	87,269	90,397	88,833.0	0.09%	94.36%
52	I	KRIV	58,153	40,367	49,260.0	0.05%	94.41%
53	I	WSVN	0	0	0.0	0.00%	94.41%
all other I's			5,369,377	5,455,735	5,412,556.0	5.59%	100.00%
TOTAL DISTANT FORM			95,680,497	97,873,337	96,776,917.0	100.00%	
3 full-time subscribers,							
commercial independent stations							
(U.S. stations only)							

**CUMULATIVE DISTANT SUBSCRIBER INCIDENTS
INCLUDED IN 1989 NIELSEN SPECIAL STUDY**

U.S. PUBLIC TV STATIONS

CY 1989: PUBLIC TV STATIONS included by Nielsen
in study for MPAA (list: P.S. Exhibit ARC-6) --
ranked by AVERAGE NUMBER OF SUBSCRIBERS, column f [= (d+e)/2].
Source of subscribers data: Thomas Larson/Cable Data Corporation
AJAX and SSF# reports dated 11 & 12-Aug-1991.

21-AUG-1991

a.	b.	c.	d.	e.	f.	g.	h.	i.		
	S		CY 1989-1:	CY 1989-2:	C.Y.1989:			Q		
R	T	CALL	TOTAL #	TOTAL #	AVG.TOTAL #	= %	CUMULATIVE	U		
A	A	SIGN	OF DISTANT	OF DISTANT	OF DISTANT	(f divided	PERCENT-	A		
N	T	OF	FULL-TIME	FULL-TIME	FULL-TIME	by sum of	AGE OF	R		
K	E	STATION	SUBSCRIBERS	SUBSCRIBERS	SUBSCRIBERS	all f)	TOTAL	FILE		
1	PA	WVIA	620,909	631,655	626,282.0	8.470%	8.47%	1*		
2	IL	WTTW	550,560	561,091	555,825.5	7.517%	15.99%	1*		
3	CA	KCET	356,119	371,436	363,777.5	4.920%	20.91%	1*		
4	NY/NJ	WNET	289,794	297,925	293,859.5	3.974%	24.88%	1*		
5	WI	WHA	312,732	273,082	292,907.0	3.961%	28.84%	2*		
6	TX	KERA	243,376	250,548	246,962.0	3.340%	32.18%	2*		
7	MI	WTVS	234,320	248,487	241,403.5	3.265%	35.45%	2*		
8	MA	WGBH	234,741	227,987	231,364.0	3.129%	38.58%	2*		
9	CA	KQED	179,524	192,219	185,871.5	2.514%	41.09%	2*		
10	DC	WHMM	179,645	190,744	185,194.5	2.505%	43.59%	2*		
11	FL	WPBT	162,079	191,703	176,891.0	2.392%	45.99%	2*		
12	MS	WMAV	154,125	155,807	154,966.0	2.096%	48.08%	3*		
13	LA	WLPB	185,311	90,811	138,061.0	1.867%	49.95%	3*		
14	CO	KRMA	127,911	130,731	129,321.0	1.749%	51.70%	3*		
15	TX	KUHT	127,827	125,022	126,424.5	1.710%	53.41%	3*		
16	NY	WNYE	116,898	122,325	119,611.5	1.618%	55.03%	3*		
17	NJ	WNJS	112,684	116,734	114,709.0	1.551%	56.58%	3*		
18	UT	KUED	113,328	115,250	114,289.0	1.546%	58.12%	3*		
19	OH	WOSU	93,500	129,975	111,737.5	1.511%	59.64%	3*		
20	NH	WENH	98,442	101,703	100,072.5	1.353%	60.99%	3*		
	all other PTV's		2,898,921	2,870,170	2,884,545.5	39.012%	100.00%			
TOTAL FULL-TIME			7,392,746	7,395,405	7,394,075.5	100.000%				
DISTANT FORM 3										
SUBSCRIBERS TO										
PTV STATIONS, CY89										

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Fourth Edition

STATISTICS FOR MANAGEMENT

Richard I. Levin

The University of North Carolina, Chapel Hill

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Prentice-Hall, Inc., Englewood Cliffs, New Jersey 07632

7-1 INTRODUCTION TO SAMPLING

Reasons for sampling

Shoppers often sample a small piece of cheese before purchasing any. They decide from one piece what the larger chunk will taste like. A chemist does the same thing when he takes a sample of whiskey from a vat, determines that it is 90 proof, and infers that all whiskey in the vat is 90 proof. If the chemist tests all the whiskey or the shoppers taste all the cheese, there will be none to sell. Testing all of the product often destroys it and is unnecessary. To determine the characteristics of the whole, we have to sample only a portion.

Suppose that, as the personnel director of a large bank, you need to write a report describing all the employees who have voluntarily left the company in the last ten years. You would have a difficult task locating all these thousands of people. They are not easily accessible as a group — many have died, moved from the community, left the country, or acquired a new name by marriage. How do you write the report? The best idea is to locate a representative sample and interview them, in order to generalize about the entire group.

Time is also a factor when managers need information quickly in order to adjust an operation or change a policy. Take an automatic machine that sorts thousands of pieces of mail daily. Why wait for an entire day's output to check whether the machine is working accurately (whether the *population characteristics* are those required by the postal service)? Instead, samples can be taken at specific intervals, and if necessary, the machine can be adjusted right away.

Census or sample

Sometimes it is possible and practical to examine every person or item in the population we wish to describe. We call this a *complete enumeration*, or *census*. We use sampling when it is not possible to count or measure every item in the population.

Examples of populations and samples

Statisticians use the word *population* to refer not only to people but to all items that have been chosen for study. In the cases we have just mentioned, the populations are all the cheese in the chunk, all the whiskey in the vat, all the employees of the large bank who voluntarily left in the last ten years, and all mail sorted by the automatic machine since the previous sample check. Statisticians use the word *sample* to describe a portion chosen from the population.

Statistics and Parameters

Function of statistics and parameters

Mathematically, we can describe samples and populations by using measures such as the mean, median, mode, and standard deviation, which we introduced in Chapters 3 and 4. When these terms describe the characteristics of a sample, they are called *statistics*. When they describe the characteristics of a population, they are called *parameters*. A *statistic* is a characteristic of a sample, and a *parameter* is a characteristic of a population.

Suppose that the mean height in inches of all tenth graders in the

Using statistics to
estimate parameters

$N, \mu, \sigma,$ and n, \bar{x}, s :
standard symbols

United States is 60 inches. In this case, 60 inches is a characteristic of the population "all tenth graders" and can be called a *population parameter*. On the other hand, if we say that the mean height in Ms. Jones's tenth-grade class in Bennettsville is 60 inches, we are using 60 inches to describe a characteristic of the sample "Ms. Jones's tenth graders." In that case, 60 inches would be a *sample statistic*. If we are convinced that the mean height of Ms. Jones's tenth graders is an accurate estimate of the mean height of all tenth graders in the United States, we could use the sample statistic "mean height of Ms. Jones's tenth graders" to estimate the population parameter "mean height of all U.S. tenth-graders" without having to count all the millions of tenth graders in the United States.

To be consistent, statisticians use lower case Roman letters to denote sample statistics and Greek or capital letters for population parameters. Table 7-1 lists these symbols and summarizes the definitions we have studied so far in this chapter.

TABLE 7-1 Differences between populations and samples

	POPULATION	SAMPLE
Definition	Collection of items being considered	Part or portion of the population chosen for study
Characteristics	"Parameters"	"Statistics"
Symbols	Population size = N	Sample size = n
	Population mean = μ	Sample mean = \bar{x}
	Population standard deviation = σ	Sample standard deviation = s

Types of Sampling

Judgment and
probability sampling

There are two methods of selecting samples from populations: *nonrandom* or *judgment* sampling, and *random* or *probability* sampling. In probability sampling, all the items in the population have a chance of being chosen in the sample. In judgment sampling, personal knowledge and opinion are used to identify those items from the population that are to be included in the sample. A sample selected by judgment sampling is based on someone's expertise about the population. A forest ranger, for example, would have a judgment sample if he decided ahead of time which parts of a large forested area he would walk through to estimate the total board feet of lumber that could be cut. Sometimes a judgment sample is used as a pilot or trial sample to decide how to take a random sample later. Judgment samples avoid the statistical analysis that is necessary to make probability samples. They are more convenient and can be used successfully even though we are unable to measure their validity. But if a study uses judgment sampling and loses a significant degree of "representativeness," it will have purchased convenience at too high a price.

engine condition, and three measures of battery-cable condition, it would take $2 \times 5 \times 4 \times 3 = 120$ tests for a complete factorial experiment.

Fortunately, statisticians have been able to help us reduce the number of tests in cases like this. To illustrate how this works, look at the consumer-products company that wants to test market a new toothpaste in four different cities with four different kinds of packages and with four different advertising programs. In such a case, a complete factorial experiment would take $4 \times 4 \times 4 = 64$ tests. However, if we do some clever planning, we can actually do it with far fewer tests—sixteen, to be precise.

Let's use the notation:

A = City 1	I = Package 1	1 = Ad program 1
B = City 2	II = Package 2	2 = Ad program 2
C = City 3	III = Package 3	3 = Ad program 3
D = City 4	IV = Package 4	4 = Ad program 4

Now we arrange the cities, packages, and advertising programs in a design called a Latin square (Fig. 7-8).

		Advertising program			
		1	2	3	4
Packages	I	C	B	D	A
	II	B	C	A	D
	III	D	A	B	C
	IV	A	D	C	B

FIGURE 7-8
A Latin square

The statistical analysis

In the experimental design represented by the Latin square, we would need only sixteen tests instead of 64 as originally calculated. Each combination of city, package, and advertising program would be represented in the sixteen tests. The actual statistical analysis of the data obtained from such a Latin square experimental design would require a form of analysis of variance a bit beyond the scope of this book.

7-7 TERMS INTRODUCED IN CHAPTER 7

CENSUS The measurement or examination of every element in the population.

CENTRAL LIMIT THEOREM A rule assuring that the sampling distribution of

the mean approaches normal as the sample size increases, regardless of the shape of the population distribution from which the sample is selected.

CLUSTERS Within a population, groups that are essentially similar to each other, although the groups themselves have wide internal variation.

CLUSTER SAMPLING A method of random sampling in which the population is divided into groups, or clusters of elements, and then a random sample of these clusters is selected

FACTORIAL EXPERIMENT Experiment in which each factor involved is used once with each other factor. In a complete factorial experiment, every level of each factor is used once with each level of every other factor.

FINITE POPULATION A population having a stated or limited size.

FINITE POPULATION MULTIPLIER A factor used to correct the standard error of the mean for studying a population of finite size that is small in relation to the size of the sample.

INFINITE POPULATION A population in which it is theoretically impossible to observe all the elements.

JUDGMENT SAMPLING A method of selecting a sample from a population in which personal knowledge or expertise is used to identify those items from the population that are to be included in the sample.

LATIN SQUARE An efficient experimental design that makes it unnecessary to use a complete factorial experiment.

PARAMETERS Values that describe the characteristics of a population.

PRECISION The degree of accuracy with which the sample mean can estimate the population mean, as revealed by the standard error of the mean.

RANDOM OR PROBABILITY SAMPLING A method of selecting a sample from a population in which all the items in the population have an equal chance of being chosen in the sample.

SAMPLE A portion of the elements in a population chosen for direct examination or measurement.

SAMPLING DISTRIBUTION OF A STATISTIC For a given population, a probability distribution of all the possible values a statistic may take on for a given sample size.

SAMPLING DISTRIBUTION OF THE MEAN A probability distribution of all the possible means of samples of a given size, n , from a population.

SAMPLING ERROR Error or variation among sample statistics due to chance; i.e., differences between each sample and the population, and among several samples, which are due solely to the elements we happened to choose for the sample.

SAMPLING FRACTION The fraction or proportion of the population contained in a sample.

SIMPLE RANDOM SAMPLING

Methods of selecting samples that allow each possible sample an equal probability of being picked *and* each item in the entire population an equal chance of being included in the sample.

STANDARD ERROR The standard deviation of the sampling distribution of a statistic.

STANDARD ERROR OF THE MEAN The standard deviation of the sampling distribution of the mean; a measure of the extent to which we expect the means from different samples to vary from the population mean, owing to the chance error in the sampling process.

STATISTICAL INFERENCE The process of making inferences about populations from information contained in samples.

STATISTICS Measures describing the characteristics of a sample.

STRATA Groups within a population formed in such a way that each group is

relatively homogeneous, but wider variability exists among the separate groups.

STRATIFIED SAMPLING A method of random sampling in which the population is divided into homogeneous groups, or strata, and elements within each stratum are selected at random according to one of two rules: (1) A specified number of elements is drawn from each stratum corresponding to the proportion of that stratum in the population, or (2) an equal number

of elements is drawn from each stratum, and the results are weighted according to the stratum's proportion of the total population.

SYSTEMATIC SAMPLING A method of random sampling used in statistics in which elements to be sampled are selected from the population at a uniform interval that is measured in time, order, or space.

7-8 EQUATIONS INTRODUCED IN CHAPTER 7

[7-1]

$$\sigma_{\bar{x}} = \frac{\sigma}{\sqrt{n}}$$

p. 291

Use this formula to derive the *standard error of the mean* when the population is *infinite*; that is, when the elements of the population cannot be enumerated in a reasonable period of time or when we sample with replacement. This equation explains that the sampling distribution has a standard deviation, which we also call a standard error, equal to the population standard deviation divided by the square root of the sample size.

[7-2]

$$z = \frac{\bar{x} - \mu}{\sigma_{\bar{x}}}$$

p. 291

A modified version of Equation 6-6, this formula allows us to determine the distance of the *sample mean* \bar{x} from the population mean μ when we divide the difference by the standard error of the mean $\sigma_{\bar{x}}$. Once we have derived a z value, we can use the Standard Normal Probability Distribution Table and compute the probability that the sample mean will be that distance from the population mean. Because of the central limit theorem, we can use this formula for non-normal distributions if the sample size is at least 30.

[7-3]

$$\sigma_{\bar{x}} = \frac{\sigma}{\sqrt{n}} \times \sqrt{\frac{N-n}{N-1}}$$

p. 292

where:

N = size of the population

n = size of the sample

This is the formula for finding the *standard error of the mean* when the population is *finite*; that is, of stated or limited size.

California—San Bernardino-Los Angeles

KSCI

Ch. 18

Network Service: None, independent.

Licensee: KSCI Inc., 12401 W. Olympic Blvd., Los Angeles, CA 90064.

Studio: 12401 W. Olympic Blvd., Los Angeles, CA 90064.

Telephone: 213-478-1818. **Fax:** 213-479-8118.

Technical Facilities: Channel No. 18 (494-500 MHz). Authorized power: 347-kw visual, 34.7-kw aural. Antenna: 2380-ft. above av. terrain, 144-ft. above ground, 5573-ft. above sea level.

Latitude	34°	11'	15.00"
Longitude	117°	41'	53.50"

Transmitter: Sunset Ridge, 5-mi. NE of Claremont.

Satellite Earth Stations: Paraclypse, 3.8-meter C-band; Miralite, 3.7-meter C-band; Scientific-Atlanta, 4.5-meter Ku-band; Standard Communications receivers.

News Service: INDX.

Ownership: Intercontinental Television Group Inc. (Group Owner).

Began Operation: June 30, 1977. Sale to present owner by World Plan Executive Council approved by FCC Dec. 19, 1986 (Television Digest, Vol. 26:45).

Represented (sales): Asian Television Sales.

Represented (legal): Leventhal, Senter & Lerman.

Personnel:

RAY BEINDORF, president.

ROSEMARY DANON, general manager.

DOROTHY MARSH, station manager.

KAREN GARCES, sales manager.

RICHARD MILLET, operations manager.

JOHN A. KOJIMA, director of finance.

MARIA RUIZ, traffic manager.

BILL WELTY, director of engineering.

JOSEPH JINN, Chinese news director.

MARY GOOD, promotions.

PTV EXHIBIT 10-X



AL FOOTNICK, production manager.
MARTIE QUAN, media relations manager.

Highest 30 Sec. Rate: \$300.

Arbitron Data: Not available.

City of License: San Bernardino. **ADI:** Los Angeles. **Rank:** 2.

LPTV, Spanish Language TV, Experimental TV, U.S. TV Calls

Utah

Cedar City. K22AH, ch. 22. Russell Communications. 137 W. Chapman Ave., Fullerton, Calif. 92635.

Cedar City. K60BY, ch. 60. Summit Communications Inc. J. Hirshfield. 63 Skagit Key, Bellevue, Wash. 98006.

Delta. K64BO, ch. 64. KUTV Inc. 2185 S. 3600 West, Salt Lake City, Utah. 84119.

Green River. K30AG, ch. 30. Green River City TV. Box 356. Green River, Utah. 84525.

Kanab. K12ND, ch. 12. Kanab Lions Club. 156 E. 100 St., Kanab, Utah. 84741.

Manti-Ephraim. K28AG, ch. 28. Sanpete Television Corp. 53882 South 850 West, Bountiful, Utah. 84010.

Marysville. K32AL, ch. 32. Univ. of Utah. 205 James Tammage Bldg., Salt Lake City, Utah. 84112.

Myton. K43AE, ch. 43. KUTV Inc. 2185 S. 3600 West, Salt Lake City, Utah. 84119.

Park City. K45AX, ch. 45. William H. Coleman. 1400 Lucky John, Park City, Utah. 84060.

St. George. K14AN, ch. 14. Russell Communications. 137 W. Chapman Ave., Fullerton, Calif. 92635.

St. George. K27AH, ch. 27. Summit Communications Inc. 63 Skagit Key, Bellevue, Wash. 98006.

St. George. K55DL, ch. 55. Julie P. Miner. 1702 N.W. Crescent, Grants Pass, Ore. 97526.

Virginia

Town Concord. W33AD, ch. 33. Paul H. Passink. Rt. 2, Box 70, Concord, Va. 24538.

Woodstock. W10AZ, ch. 10. Ruarch Associates. 352C Fort Valley Route, St. Davids Church, Va. 22652.

Washington

Colville. K09UP, ch. 9. Statesman-Examiner Inc. 220 So. Main St., Colville, Wa. 99114.

Ellensburg. K35BJ, ch. 35. Okanogan Television Inc. 618 Okoma Dr., Omak, Wa. 98841.

Omak-Okanogan. K31AH, ch. 31. Statesman-Examiner Inc. 25 S. Ash, Box 945, Omak, Wa. 98841.

Wenatchee. K30AJ, ch. 30. Spokane Television. 960 Valley Mail Pkwy., East Wenatchee, Wa. 98801.

Wenatchee. K14BF, ch. 14. Westcoast Broadcasting Inc. Box 159, Wenatchee, Wa. 98801.

Wisconsin

Ladysmith. W06AS, ch. 6. Bell Press Inc. 120 W. 3rd St., Ladysmith, Wis. 54848.

Land O'Lakes. W16AC, ch. 16. Land of Lakes Superstation Inc. c/o Violet Baker, Land of Lakes, Wis. 54540.

Milwaukee. W08BY, ch. 8. Charles Woods. 150 Island Dr., Key Biscayne, Fla. 33149.

Rice Lake. W15AB, ch. 15. Chronotype Publishing Co. 28 S. Main St., Rice Lake, Wis. 54818.

Ripon. W42AF, ch. 42. STV of Oshkosh Inc. Box 597, Adams, Wis. 53910.

Wyoming

Casper. K13UC, ch. 13. Manna Media Corp. 111 East Second, Casper, Wyo. 82601.

Cheyenne. K11RP, ch. 11. Russell Communications. 137 W. Chapman Ave., Fullerton, Calif. 92635.

Cheyenne. K49AY, ch. 49. Echonet Corp. 2250 S. Raritan, Englewood, Colo. 80110.

Douglas. K07RO, ch. 7. Sky-Window TV Inc. 10th & Richards, Box 4, Douglas, Wyo. 82633.

Gillette. K16AE, ch. 16. C-Tel Inc. Box 30635, Billings, Mont. 59107.

Gillette. K22AD, ch. 22. Summit Communications Inc. 63 Skagit Key, Bellevue, Wash. 98006.

Jackson. K48BM, ch. 48. Ambassador Media Corp. 7600 Potomac Fall Rd., McLean, Va. 22102.

Riverton. K08GO, ch. 8. Riverton Freemont TV Club Inc. 133 S. Second East, Box 628, Riverton, Wyo. 82501.

Shoshoni-Thermopoulis. K40AQ, ch. 40. Riverton Fremont TV Club Inc. 133 S. 2nd E., Box 628, Riverton, Wyo. 82501.

West Riverton. K44AW, ch. 44. Riverton Freemont TV Club Inc. 133 S. Second East, Box 628, Riverton, Wyo. 82501.

Guam

Tamuning. K14AM, ch. 14. Guahan Airwaves Corp. Box 24816, Guam. 96921.

Spanish-language TV Stations

The following Spanish-language television stations operate within the United States or near the U.S. border. Readers should refer to the first part of section C for further information on the stations listed below.

Arizona

Phoenix—KTUV-TV Phoenix (ch 33).

California

Corona—KVEA-TV Corona (ch 52).

El Centro—XHBC-TV Mexicali, Mexico (ch 3).

Fresno—KFTV-TV Hanford (ch 21).

Los Angeles—KMEF-TV Los Angeles (ch 34).

Los Angeles—KSCI-TV San Bernardino (ch 18).

Sacramento—KCSO-TV Modesto (ch 19).

Salinas-Monterey—KSMS-TV Monterey (ch 67).

San Diego—XEWT-TV Tijuana, Mexico (ch 12).

San Francisco—KDTV-TV San Francisco (ch 14).

San Francisco—KSTS-TV San Jose (ch 48).

Florida

Fort Lauderdale—WSCV-TV Fort Lauderdale (ch 51).

Miami—WLTU-TV Miami (ch 23).

Illinois

Chicago—WBBS-TV West Chicago (ch 60).

Chicago—WCIU-TV Chicago (ch 26).

Chicago—WSNS-TV Chicago (ch 44).

Nevada

Reno—KREN-TV Reno (ch 27).

New Mexico

Albuquerque—KLUZ-TV Albuquerque (ch 41).

New York

New York—WNJU-TV Linden, N.J. (ch 47).

New York—WXTV-TV Paterson, N.J. (ch 41).

Texas

Corpus Christi—KORO-TV Corpus Christi (ch 28).

El Paso—KINT-TV El Paso (ch 26).

El Paso—XEJ-TV Juarez, Mexico (ch 5).

El Paso—XEPM-TV Juarez, Mexico (ch 2).

El Paso—XHIJ-TV Juarez, Mexico (ch 44).

Houston—KXLN-TV Rosenberg (ch 45).

Laredo—XFE-TV Nuevo Laredo, Mexico (ch 2).

San Antonio—KWEX-TV San Antonio (ch 41).

Puerto Rico

Fajardo—WMTJ-TV Fajardo (ch 40).

Mayaguez—WNJX-TV Mayaguez (ch 22).

Mayaguez—WOLE-TV Aguadilla (ch 12).

Mayaguez—WORA-TV Mayaguez (ch 5).

Mayaguez—WVEO-TV Aguadilla (ch 44).

Ponce—WQTO-TV Ponce (ch 26).

Ponce—WSTE-TV Ponce (ch 7).

Ponce—WSUR-TV Ponce (ch 9).

San Juan—WAPA-TV San Juan (ch 4).

San Juan—WIPR-TV San Juan (ch 6).

San Juan—WKAQ-TV San Juan (ch 2).

San Juan—WLIH-TV Caguas (ch 11).

Experimental TV Stations

The following is a list of the experimental television stations authorized by the FCC as of January 1988.

Channel 7 Inc.—WSTE-TV Ponce, P.R. operates experimental TV station on ch 7 using 5.01 kw vis. 100 kw visual and 316 kw visual and utilizing the transmitter locations in Puerto Rico.

Dielectric Communications Antennas—KA2Y, Cherry Hill twp., N.J. Chs 2 to 69, 54-88 mhz and 174-806 mhz, authorized to use up to 100 kw vis. in the lower-VHF band, 316 kw visual in the upper-VHF band, and 5,000 kw on UHF channels up to ch 69.

King Broadcasting Co.—KHNL-TV Honolulu (ch 1) operates an experimental TV station with a co-channel TV transmitter.

National Association of Broadcasters—Experimental TV broadcast station in Washington on channels 5 and 59, 1.5 kw vis. Ant 375 ft. The station, licensed temporarily as WWHD-TV, broadcasts transmission of advanced television systems. Executives: E. Fritts, pres; John Abel, exec VP; Thomas B. Keel, senior VP, science & technology; E. Benjamin Cruz, field, project dir.

Translator Sales & Service (Bob Bradford)—KB2X, Various locations in Washington, Oregon, Idaho and Montana, Ch 3, 60-66 mhz, 1 w; ch 69, 800-806 mhz, 20 w. To set up a temporary VHF and/or UHF translator at a site proposed for a permanent translator installation.

U.S. Television Stations by Call Letters

CBET Windsor ON
KAAL Austin MN
KAAS-TV Salina KS
KABB San Antonio TX
KABC-TV Los Angeles CA
KABY-TV Aberdeen SD
KACB-TV San Angelo TX
*KACV-TV Amarillo TX
KADN Lafayette LA
*KAET Phoenix AZ
*KAFT Fayetteville AR
KAGL San Bernardino CA
*KAID Boise ID
KAIL-TV Wailuku HI
KAIL Fresno CA
KAIT-TV Jonesboro AR
KAKE-TV Wichita KS
*KAKM Anchorage AK
KALB-TV Alexandria LA
KAMC Lubbock TX
KAME-TV Reno NV
KAMR-TV Amarillo TX
*KAMU-TV College Station TX

KAPP Yakima WA
KARD West Monroe LA
KARE Minneapolis MN
KARK-TV Little Rock AR
KASK-TV Las Cruces NM
KATC Lafayette LA
KATN Fairbanks AK
KATU Portland OR
KATV Little Rock AR
KAUT Oklahoma City OK
KAUZ-TV Wichita Falls TX
KAVU-TV Victoria TX
*KAWB Brainerd MN
*KAWB Bemidji MN
KAYS-TV Hays KS
KAYU-TV Spokane WA
*KAZQ Albuquerque NM

KBAK-TV Bakersfield CA
KBBL Big Bear Lake CA
KBCI-TV Boise ID
KBCP Paradise CA
*KBDI-TV Broomfield CO

KBFD Honolulu HI
*KBHE-TV Rapid City SD
KBHK-TV San Francisco CA
KBIM-TV Roswell NM
*KBIN Council Bluffs IA
KBJR-TV Superior, Wis. WI
KBLO-TV Rapid City SD
*KBME Bismarck ND
KBMT Beaumont TX
KBMY Bismarck ND
KBRR Thief River Falls MN
KBSI Cape Girardeau MO
KBTV Des Moines IA
KBTV-TV Bryan TX
KBVO Austin TX
*KBVU-TV Provo UT

*KCAH Watsonville CA
KCAN Albion NE
KCAU-TV Sioux City IA
KCBK Salinas CA
KCBF-TV Lubbock TX
KCBS-TV Los Angeles CA

KCBY-TV Coos Bay OR
KCCI-TV Des Moines IA
KCCO-TV Alexandria MN
KCCW-TV Walker MN
KCCZ Cedar City UT
KCCN-TV Temple TX
KCEO-TV Oroville CA
*KCEI-TV Los Angeles CA
KCFW-TV Kalispell MT
KCHF Santa Fe NM
KCIK El Paso TX
KCIT Amarillo TX
KCJA Santa Fe NM
*KCKA Centralia WA
KCKU Tyler TX
KCMH El Dorado AR
KCMY Sacramento CA
KCNK-TV Denver CO
KCOP-TV Los Angeles CA
*KCOS El Paso TX
KCOY-TV Santa Maria CA
KCPM Chico CA
KCPQ Tacoma WA

*KCPT Kansas City MO
KCRA-TV Sacramento CA
KCRG-TV Cedar Rapids IA
KCRL Reno NV
*KCSM-TV San Mateo CA
KCSO Modesto CA
KCSU-TV San Diego CA
KCTD Butte MT
*KCTS-TV Seattle WA
KCTV Kansas City MO
KCTZ Bozeman MT
KCVT Shawnee OK
*KCWC-TV Lander WY
KCWT Wenatchee WA

KDAF Dallas TX
KDAV Davenport IA
KDBC-TV El Paso TX
KDEB-TV Springfield MO
KDFI-TV Dallas TX
KDFW-TV Dallas TX
*KDIN-TV Des Moines IA
KDKA-TV Pittsburgh PA

Illinois—Chicago

WCIU-TV

Ch. 26

Network Service: Univision.

Licensee: Weigel Broadcasting Co., Board of Trade Bldg., 141 W. Jackson Blvd., Chicago, IL 60604.

Studio: 141 W. Jackson Blvd., Chicago, IL 60604.

Telephone: 312-663-0260. Telex: 270-255. Fax: 312-663-0585.

Technical Facilities: Channel No. 26 (542-548 MHz). Authorized power: 2000-kw max. visual, 200-kw max. aural. Antenna: 1555-ft. above av. terrain, 1707-ft. above ground, 2302-ft. above sea level.

Latitude 41° 52' 44"
Longitude 87° 38' 10"

Transmitter: Sears Bldg., 233 S. Wacker Dr., Chicago.

Satellite Earth Stations: 4 in operation.

News Services: City Hall News, Reuters, UPI.

Ownership: Weigel Broadcasting Co. (Group Owner).

Began Operation: February 6, 1964.

Represented (sales): Univision.

Represented (legal): Cohn & Marks.

Represented (engineering): David Steel & Associates Inc.

Personnel:

HOWARD SHAPIRO, president.

PETER ZOMAYA, assistant general manager & sales manager.

MARY HOUSER, film director.

BERNARD HOELTING, chief engineer.

DON AQUIRRE, news director.

NORMAN SHAPIRO, business & legal advisor.

Highest 30 Sec. Rate: \$525.

City of License: Chicago. ADI: Chicago. Rank: 3.

Total Households: ©MSI Consumer Market Data as of 1/1/90. TV Homes, TV% and Circulation ©1990 Arbitron.
Circulation coverage based on Arbitron study.



Net Weekly Circulation	State County	Total Households	TV Households	%
Between 5-24%	ILLINOIS			
	Cook	1,969,600	1,941,300	99
	INDIANA			
	Lake	174,400	172,300	99
	Newton	5,200	5,100	98
Totals		2,149,200	2,118,700	99
Net Weekly Circulation (1990)			192,900	
Average Daily Circulation (1990)			67,300	

Texas—Galveston-Houston

KTMD
Ch. 48

Network Service: Telemundo.

Licensee: Telemundo Group Inc., 1740 Broadway, 18th Floor, New York, NY 10019.

Studio: 3903 Stoney Brook, Houston, TX 77063.

Telephone: 713-974-4848. **Fax:** 713-974-5875.

Technical Facilities: Channel No. 48 (674-680 MHz). Authorized power: 4198-kw max. & 1062-kw horizontal visual, 323-kw max. & 212-kw horizontal aural. Antenna: 1176-ft. above av. terrain, 1199-ft. above ground, 1212-ft. above sea level.

Latitude 29° 27' 57"
Longitude 95° 13' 23"

Transmitter: Rte. 3, Box 32, Alvin.

Satellite Earth Stations: Comtech, 5-meter Ku & C-band; Vertex, 6.1-meter C-band; 4 Pinzone receivers.

News Services: AP, CNN.

Ownership: Telemundo Group (Group Owner).

Began Operation: February 1, 1988. Sale to present owner by Raymond G. Schindler, et al., approved by FCC March 9, 1988.

Represented (sales): Telemundo.

Represented (legal): Hogan & Hartson.

Represented (engineering): Hammett & Edison Inc.

Personnel:

MAURICIO MENDEZ, vice president & general manager.

BECKY DIAZ, general sales manager.

BLANE HUHN, chief engineer.

GUILLERMO RESTREPO, news director.

ANNA CARDONA, program & promotion manager.

P. J. GRIGGS, business manager.



KTMD BPT-780907KF Granted 3/1/85

© American Map Corp., No. 14244

MARCELLO MARINI, governmental & community affairs director.

Highest 30 Sec. Rate: \$600.

Arbitron Data: Not available.

City of License: Galveston. ADI: Houston. Rank: 10.

SELECTION OF COMMERCIAL STATIONS TO BE INCLUDED
IN THE 1989 SPECIAL NIELSEN STUDY -- AN ILLUSTRATION

<u>Station</u>	<u>Type</u>	<u>Number of Distant Form 3 Subscribers</u>	<u>Included in Sample?</u>
KSCI	Independent	103,114	NO
WCIU	Independent	101,484	NO
KTXH	Independent	100,902	YES
WTOG	Independent	93,659	YES
KTMD	Independent	92,906	NO

Source: NAB 1989 Exhibit 38X (June 19, 1990 CDC printout used by Mr. Cooper to select commercial stations)

SELECTED SPECIALTY STATIONS WITH OVER
80,000 FULL TIME DISTANT SUBSCRIBERS
IN 1989-1 OR 1989-2 THAT WERE
NOT INCLUDED IN THE 1989 MPAA SPECIAL STUDY¹

<u>Station</u>	<u>Subscribers</u>
WPCB	299,617
WHFT	157,208
WKOI	101,421
WCLF ²	95,393

¹Source: Cable Data Corporation and NAB 1989 Exhibit 37x

²1989-2 only

EXHIBITS -
9/20/91

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2 ----- X

3 In the Matter of: :

4 1983 CABLE COPYRIGHT : CRT 84-1:83-CD

5 ROYALTY DISTRIBUTION :

6 ----- X

7 (This volume contains pages 990 through 1151)

8

9

10 Room 458
11 1111 20th Street, Northwest
12 Washington, D. C.

13 Tuesday, July 2, 1985

14

15 The hearing in the above-entitled matter re-
16 convened at 10:00 a.m., pursuant to adjournment.

17

18 BEFORE:

19 EDDIE RAY Chairman

20 MARIO R. AGUERO Commissioner

21

22 ROBERT CASSLER General Counsel

23

24

25

1 APPEARANCES:

2 MPAA:

3 ARTHUR SCHEINER, ESQ.
DENNIS LANE, ESQ.
4 LESLIE SWACKHAMMER, ESQ.
Wilner & Scheiner
5 Suite 300
1200 New Hampshire Avenue, N.W.
6 Washington, D. C.

7 NAB:

8 VICTOR FERRALL, ESQ.
JEFFREY S. LINDER, ESQ.
9 JOHN STEWART, ESQ.
ROBERT M. HALPERIN, ESQ.
10 Crowell & Moring
11 1100 Connecticut Avenue, N.W.
Washington, D. C.

12 Joint Sports Interests:

13 DAVID LLOYD, ESQ.
ROBERT GARRETT, ESQ.
14 Arnold & Porter
1200 New Hampshire Avenue, N.W.
15 Washington, D. C.

16 ASCAP:

17 I. FRED KOENIGSBERG, ESQ.
One Lincoln Plaza
18 New York, New York

19 BMI:

20 CHARLES T. DUNCAN, ESQ.
MICHAEL W. FABER, ESQ.
21 Reid & Priest
1111 19th Street, N.W.
22 Washington, D. C.

23

24

25

1 APPEARANCES:2 Devotional: Old Time Gospel Hour:

3 JOHN H. MIDLEN, JR., ESQ.
4 1050 Wisconsin Avenue, N.W.
Washington, D. C.

5 CBN:

6 BARRY GODFREY, ESQ.
7 Fisher, Wayland, Cooper & Leader
8 3525 Davenport Street, N.W.
Washington, D. C.

9 Canadian:

10 DOUGLAS THOMPSON, ESQ.
11 KENDALL SATTERFIELD, ESQ.
Finkelstein, Thompson & Levenson
12 2828 Pennsylvania Avenue, N.W.
Washington, D. C.

13 NPR:

14 DAVID O. STEWART, ESQ.
15 Miller, Cassidy, Larroca & Lewin
Suite 500
16 2555 M Street, N.W.
Washington, D. C.

17

18

19

20

21

22

23

24

25

26

C O N T E N T S

<u>WITNESS</u>	<u>DIRECT</u>	<u>CRCSS</u>	<u>REDIRECT</u>	<u>VOIR DIRE</u>
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RICHARD LOFTUS	994	- -	1085	1058
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By Mr. Ferrall	- -	1036 1059	- -	996
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By Mr. Midlen	- -	1065	- -	1014
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By Mr. Satterfield - -	- -	1069	- -	- -
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By Mr. David Stewart -	- -	1071	- -	- -
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ALLEN R. COOPER

By Mr. Ferrall (resumed	1097	- -	- -	- -
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<u>EXHIBITS</u>	<u>IDENTIFIED</u>
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PR No. 230-X Ann. CATV Radio Service	1082
--------------------------------------	------

NAB No. 21-X Available Syndicated Programming Service	1100
--	------

NAB No. 22-X Average '83 full-time Distant Cable Subscribers	1144
---	------

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

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WASHINGTON, D.C. 20005

(202) 234-4433

1 it is self-evident that 33 million -- excuse me -- 34.2
2 million is higher than 33.8 million. If that's what you
3 want, then I think the answer is self-evident.

4 CHAIRMAN RAY: Well, I think the question posed
5 to Mr. Cooper -- well, the objection is overruled.

6 BY MR. FERRALL:

7 Q Mr. Cooper, we've agreed that Scooby-Doo lost
8 more protectability, or more potential protection, more
9 areas in which protection could have been sought for it
10 than did Bozo, when the syndicated exclusivity rules
11 were lifted, is that correct?

12 A I think we are in agreement on that, yes.

13 Q We've also agreed that viewing is an appropriate
14 measure of harm, benefit and marketplace value?

15 A I will agree with that, as far as syndicated
16 programs are concerned.

17 Q But not as far as other programming is concerned?

18 A That's correct.

19 Q You do not agree with it as far as other pro-
20 gramming is concerned?

21 A I do not agree with it with respect to other
22 categories of programming.

23 Q Okay. Fine. Thank you. Now -- and we've
24 agreed that on the basis of viewership, the value as
25 shown by your Exhibit 21, Bozo's Circus is greater than

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

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Consumer Reports

RATINGS

TV CHANNELS

FAST-FOOD BREAKFASTS

COMPUTER PRINTERS

UMBRELLAS

DISHWASHING LIQUIDS

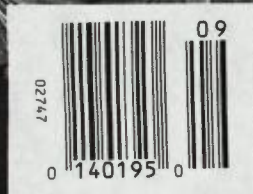
BATHROOM TISSUES

TELEVISION

How you rate the channels
How you rate the cable systems



NOTICE OF ANNUAL MEETING OF
CONSUMERS UNION OF U.S., INC.,
PAGE 573.





THE CHANNELS.

What TV fare satisfies best? Readers rate cable channels and pay channels against PBS and the big networks. Starts on facing page.

THE SERVICE.

Readers are less satisfied with their local cable system than with any other type of service we've rated. For the reasons why, turn to page 581.

THE NEW WORLD OF TV.

Are cable-system operators too big and too powerful? If you think the answers don't affect what you pay and what you see, think again. See page 583.

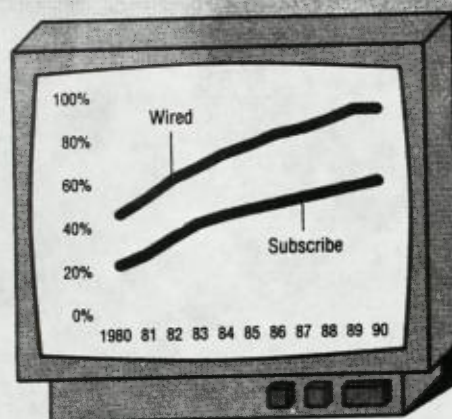
In more than 200,000 responses to our 1990 Annual Questionnaire and a smaller survey done last spring, readers told us about their experiences with cable TV service and their opinion of the programming it delivers. Our readers are particularly knowledgeable on the

subject: 75 percent subscribe to a cable service, compared with 60 percent for the country as a whole. About one-third of those readers have been cable subscribers longer than five years. About one-fourth have subscribed to more than one cable system.

HOW CABLE HAS CHANGED TV VIEWING

WIRED FOR CABLE TV...

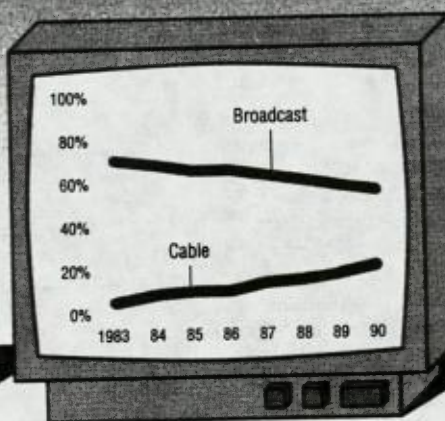
U.S. homes wired for cable and those actually subscribing



Source: Cable TV Investor, A.C. Nielsen data.

AND WATCHING MORE OF IT...

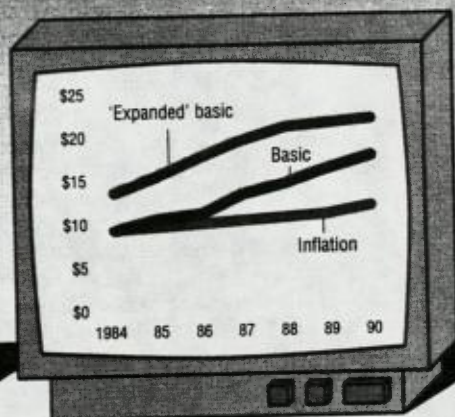
Broadcast and cable networks' average share of TV audience



Source: Cabletelevision Advertising Bureau.

BUT PAYING MORE, TOO...

Average U.S. monthly cable rates compared with the Consumer Price Index



Source: Paul Kagan Assoc., Dept. of Labor.

THE CHANNELS

Back in the days when a dish was used to serve food, not to pluck TV signals from the sky, cable TV merely relayed broadcast programming to places that distance or topography had cut off from reception. Today, the dishes at cable systems' "headends" can receive 60 national and 40 regional networks in addition to *NBC*, *CBS*, *ABC*, *PBS*, and local broadcast stations, both UHF and VHF.

Most people don't need cable to get TV, though many relish the improved reception. The main reason our readers who get cable say they're willing to pay close to \$300 a year, on average: the programming. Three-quarters of the readers said they want the basic cable channels—that is, the ones that come in a monthly service package and that typically carry commercials. About half agreed that "cable shows are so good that I'd never consider dropping cable."

But our survey also turned up echoes of the familiar gripe about TV—there's nothing to watch. One-third of the readers with cable complained about insufficient variety—too many of the channels look alike.

At the same time, readers want

more. One-third want specific channels that their system doesn't offer. One-sixth complained that the system they're stuck with doesn't have enough channels.

Coming changes in technology will permit cable companies to offer hundred of channels. Given the history of cable TV and broadcast TV, one cannot be optimistic that more channels will in fact increase the variety or quality of the programming. But greater capacity will give cable a second chance at missed opportunities.

One coming change will be in the cable itself. Systems are starting to replace low-capacity coaxial cable with optical fiber—a cable scarcely thicker than a pencil that can hold dozens of strands, each able to carry 60 channels on a beam of laser light.

Another change is in how the signals will be carried on the cable. Digital compression shoehorns four or eight channels into the space that one channel now occupies. With compression, the typical 35-channel system could grow to 280 channels, the deluxe 150-channel system to 600 or 1200 channels.

With all that capacity, the channel lineup of tomorrow's cable system may look even more like a magazine rack than it does now, with a few general publications and many specialized ones. Consider some channels recently started up or on drawing boards: *Celticvision*, with all-Irish programming; *Court TV*, with cameras rolling in the courts; the *Cowboy Channel*, for everything Western; the *Sci-Fi Channel*, to tap the "Trekkies" market; and a four-in-one channel for media junkies, showing the three networks and *Cable News Network* simultaneously on a quartered screen.

Additional capacity will allow a cable network to offer multiple versions of itself. HBO is now testing a three-channel scheme in Kansas, Wisconsin, and Texas that offers its customers three sets of programs for its usual price, tripling HBO's chance of grabbing audience share. Other channels may be offered in more than one language,

or in a commercial-free edition for an extra fee.

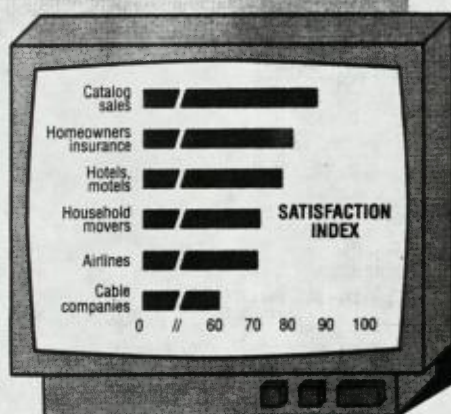
With more channels, pay-per-view programming, now available to relatively few customers, would probably expand. PPV lets viewers call the cable company to order recent movies, concerts, and sporting events, for charges ranging from about \$5 to \$40. Next summer NBC plans to show the 1992 Olympics on three pay-per-view channels in addition to its regular broadcast.

PPV aims to wrest business from the \$15- to \$20-billion video-rental market. A system with a couple of hundred channels would have enough room to devote 30, 40, or more of them to PPV movies, with starting times for each movie scheduled at 15-minute intervals. Another PPV arrangement, currently being tested by Tele-Communications

There are more channels, and more coming as systems rewire to carry extra programming. Readers rate 44 channels.

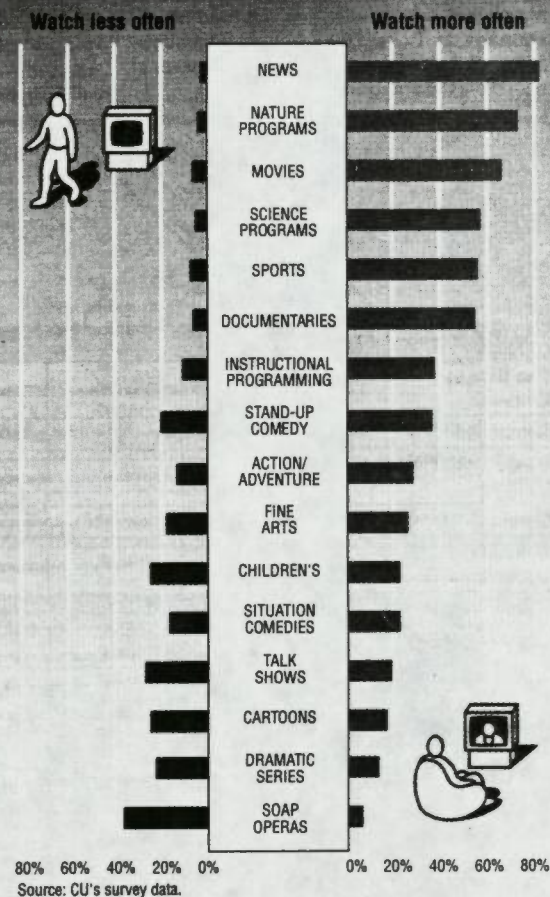
AND NOT EXACTLY HAPPY*

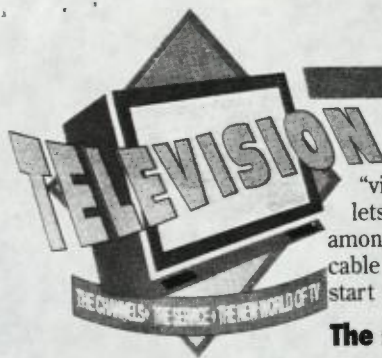
Here's reader satisfaction with cable and various other services



*At least according to readers responding to CU's survey.

HOW CABLE HAS CHANGED VIEWING HABITS





Inc., the nation's biggest cable operator: "video on demand," which lets customers order from among hundreds of titles in a cable system's library and start the show any time.

The state of the art

The line between broadcast programming and cable programming continues to blur. Cable has captured popular shows and sports from broadcast TV. In Eureka, Calif., the cable system outbid local stations for syndicated shows such as "Jeopardy" and "Oprah Winfrey." Most of the games played by New York City's two baseball teams, the Yankees and the Mets, can be seen only over cable. When ESPN, a cable sports network, televises baseball and football, it often blacks

out the local station's broadcast.

Cable channels, once just pipelines, increasingly produce original programming, too. Seven cable channels made more than 70 feature films last year. TNT, Ted Turner's newest network, presents about two a month. The number of made-for-cable series grows every season.

Cable channels, like independent broadcast channels, are also littered with network hand-me-downs, everything from "Dobie Gillis" and "My Three Sons" to "Moonlighting" and "Miami Vice."

Here's a rundown on the kinds of channels:

Movies. Most movies reach the video store six months after their theatrical release. A month or two later they're shown on cable on a pay-per-view basis. Then they go to HBO, Showtime, and the other pay-

movie channels. In addition, HBO and Showtime air original movies and series, pop concerts, comedy, and sports such as tennis and boxing. With much the same product, HBO and Showtime try to achieve distinctiveness—and attract customers—by obtaining exclusive rights from the various motion picture studios. "Presumed Innocent," from Warner, and "Ghost," from Paramount, will turn up only on HBO. "Dances with Wolves," from Orion, and "Postcards from the Edge," from Columbia, will appear only on Showtime. (HBO has also produced consumer-information specials in cooperation with CU.)

HBO and Showtime each have a sibling channel, Cinemax and The Movie Channel, that concentrates more on movies. American Movie Classics—sometimes a pay channel,

RATINGS

TV channels

Listed by groups; within groups, listed in order of overall quality score based on responses to CU's 1990 Annual Questionnaire. Differences of 2 points or more in score are meaningful.

1 Channel. Channels were rated by at least 4400 of their current and former subscribers. Most were rated by 25,000 or more. The three big broadcast-TV networks—ABC, CBS, NBC—were rated by nearly 180,000.

2 Type. The channel's typical programming, as explained in the accompanying

report.

3 Overall score. Readers rated a channel's overall program quality on a six-point scale, from excellent to very poor. Had everyone judged a channel excellent, its score would have been 100; had everyone judged it very poor, its score would have been 0. These results pertain only to CON-

1 Channel	2 Type	3 Overall score	4 Readers' rating	5 Comments
Pay/Premium Channels				
The Disney Channel	Children	74		D,W,C
Showtime	Movie	61		—
Home Box Office (HBO)	Movie	61		—
Cinemax	Movie	60		O
The Movie Channel	Movie	60		—
Basic channels				
The Discovery Channel	Special-audience	77		D
Cable News Network (CNN)	News and weather	76		D
PBS	Broadcast network	76		D
CNN Headline News	News and weather	74		D
ESPN	Sports	70		D

1 Channel	2 Type	3 Overall score	4 Readers' rating	5 Comments
Arts & Entertainment	Cultural	69		D
The Weather Channel	News and weather	66		D
American Movie Classics (AMC)	Movie	66		D,W
Turner Network TV (TNT)	General-audience	65		—
The Learning Channel	Special-audience	64		D,W
Financial News Network (FNN)	News and weather	63		D,O
The Family Channel	General audience	62		W
WTBS/TBS	Superstation	62		—
Nickelodeon	Children	62		W,Y,C
WGN	Superstation	61		—
Lifetime	Special audience	61		W

more often a basic channel—features classics. A recent addition to the ranks is *Encore*, created by Tele-Communications Inc. to be “the Wal-Mart of pay channels.” Priced at \$1 to \$5 a month, *Encore* airs films from the '60s, '70s, and '80s.

Cultural. *Bravo*, a pay channel in a few places, a basic channel elsewhere, bills itself as “cable’s culture channel.” On any given night, viewers might see an opera, a chamber-music concert, or a repertory-house film. *Arts & Entertainment*, a basic channel, offers a similar mix, along with documentaries and shows imported from British TV.

Sports. A programming staple, sports are carried on many channels—the networks, local stations, superstations like *TBS*, and generalists like *USA Network*. Sports is *ESPN*’s mainstay. It has all the main-

stream sports, plus things like truck pulls, waterskiing competitions, and chainsaw contests.

Children. *The Disney Channel* shows all the favorites from the Disney Studios, along with original films, classic films with family appeal, new features, and series. *Nickelodeon* and its nighttime version, *Nick at Nite*, offer vintage reruns, talk, cartoons, and game shows aimed at kids.

Music. *MTV*’s staple is the rock video. It also airs concerts, quirky game shows, and various music-related programs. Its cousin, *VH-1*, has a softer playlist (less rap and heavy metal), one that’s designed for an audience not quite as youthful. *The Nashville Network* and *Country Music TV* feature country and western.

News and weather. *Cable News*

Network has set the standard for round-the-clock coverage. It also presents talk shows and other features. Its sidekick, *CNN Headline News*, takes you “around the world in 30 minutes,” with fast-paced updates each half-hour. *Financial News Network* pounds the business beat; it was recently merged into *CNBC* (the *Consumer News and Business Channel*), owned by NBC. *The Weather Channel* combines national and local forecasting.

General audience. These channels go for the broadest appeal, with series, movies, and sports. Included are Ted Turner’s *TNT*, *USA Network*, and *The Family Channel*, which also carries some religious programming.

Special audience. *Lifetime* has targeted women as its audience—with movies, shows on health, fit-

Spice of life?

Three of four readers agreed with this sentiment: Given all the channels, there’s still often nothing to watch.

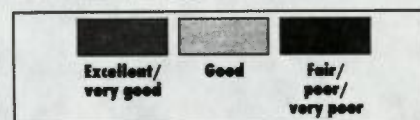
SUMER REPORTS readers, whose viewing habits may differ from those of Americans in general.

4 Readers’ rating. A percentage breakdown of how readers rated channels on the scale of excellent to very poor.

5 Comments. D = at least one-fourth of a channel’s viewers called the programming

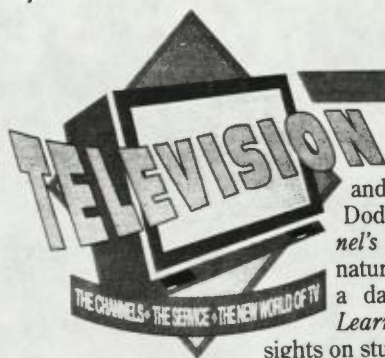
“different, unique, or distinctive” from that on other channels. W = women rated the channel significantly higher than did men. (Men rated no channel significantly higher than did women.) O = older readers (45 years or older) rated the channel higher than did younger readers. Y = younger readers (18 to 44) gave higher ratings. C =

60 percent or more of the respondents who have children at home called the channel a favorite of their youngsters.



1 Channel	2 Type	3 Overall score	4 Readers' rating	5 Comments
USA Network	General audience	60	<div><div></div><div></div><div></div><div></div><div></div></div>	—
C-SPAN	Public affairs	59	<div><div></div><div></div><div></div><div></div><div></div></div>	D,O
Nick at Nite	Children	59	<div><div></div><div></div><div></div><div></div><div></div></div>	Y
Bravo	Cultural	58	<div><div></div><div></div><div></div><div></div><div></div></div>	D,W
NBC	Broadcast network	57	<div><div></div><div></div><div></div><div></div><div></div></div>	—
The Nostalgia Channel	Special-audience	57	<div><div></div><div></div><div></div><div></div><div></div></div>	W
FNN: Score	Sports	57	<div><div></div><div></div><div></div><div></div><div></div></div>	—
WPIX	Superstation	56	<div><div></div><div></div><div></div><div></div><div></div></div>	—
The Travel Channel	Special-audience	56	<div><div></div><div></div><div></div><div></div><div></div></div>	D,W
WWOR	Superstation	56	<div><div></div><div></div><div></div><div></div><div></div></div>	—
The Nashville Network (TNN)	Music	56	<div><div></div><div></div><div></div><div></div><div></div></div>	O
ABC	Broadcast network	56	<div><div></div><div></div><div></div><div></div><div></div></div>	W

1 Channel	2 Type	3 Overall score	4 Readers' rating	5 Comments
CNBC	News and weather	56	<div><div></div><div></div><div></div><div></div><div></div></div>	O
Fox Network	Broadcast network	55	<div><div></div><div></div><div></div><div></div><div></div></div>	Y
VH-1	Music	54	<div><div></div><div></div><div></div><div></div><div></div></div>	W,Y
Country Music Television (CMT)	Music	53	<div><div></div><div></div><div></div><div></div><div></div></div>	W,O
CBS	Broadcast network	53	<div><div></div><div></div><div></div><div></div><div></div></div>	W
Family Guide Network	Special-audience	52	<div><div></div><div></div><div></div><div></div><div></div></div>	W
FamilyNet	General-audience	51	<div><div></div><div></div><div></div><div></div><div></div></div>	W
ACTS Satellite Network	General-audience	50	<div><div></div><div></div><div></div><div></div><div></div></div>	—
Movietime	Movies	48	<div><div></div><div></div><div></div><div></div><div></div></div>	—
MTV	Music	40	<div><div></div><div></div><div></div><div></div><div></div></div>	Y
Black Entertainment Television	Special-audience	39	<div><div></div><div></div><div></div><div></div><div></div></div>	W



ness, and family, and series like "The Days and Nights of Molly Dodd." *The Discovery Channel's* forte is science and nature documentaries, with a dash of adventure. *The Learning Channel* sets its sights on students of all stripes, covering a range of courses from basic reading to career skills. *Black Enter-*

tainment Television offers its audience music from gospel to rap, plus news, talk, and other programming.

Superstations. They're local broadcast stations, with the usual mix of reruns, movies, and local sports and news, now seen in homes everywhere, thanks to cable. Best known: *TBS*, which is *WTBS*, channel 17, in Atlanta. Other supers:

Chicago's *WGN*, New York's *WPIX* and New Jersey's *WWOR*.

Public affairs. *C-SPAN* airs Congressional hearings, press conferences, panel discussions, and call-in shows. Many systems also include public-access channels, which televise meetings and area events like Little League games, festivals, and parades.

Home shopping. Two channels devote themselves to nonstop selling, as the box at left details.

Readers' picks

Our Annual Questionnaire asked subscribers to rate, on a scale of excellent to very poor, the quality of the programming shown on the three big broadcast networks, *PBS*, *Fox*, and more than three dozen basic and pay cable channels. We had at least 25,000 responses for most cable channels and well over 100,000 for a few. Practically everyone—almost 180,000 readers—judged the big networks.

The top-rated channels were *The Discovery Channel*, *CNN*, *PBS*, *CNN Headline News*, and *The Disney Channel*. About two-thirds of our readers called them excellent or very good. At least one-fourth called their programming "distinctive."

The commercial broadcast networks—*NBC*, *ABC*, *CBS*, and *Fox*—landed in the lower half of the list, among such offerings as *The Nostalgia Channel*, *The Travel Channel*, and superstations *WPIX* and *WWOR*. Less than one-third of viewers judged the networks excellent or very good. By a slight margin, *CBS* rated lowest of the big three, a position that parallels its Nielsen standings in recent years.

TNT was judged the top general-audience channel. It may have won that rating because it shares with its sibling, *TBS*, the 3300-film *MGM* library, replete with classics such as "Gone With the Wind," "Casablanca," and "King Kong."

Our readers showed only mild enthusiasm for the four big pay-movie channels—*HBO*, *Cinemax*, *Showtime*, and *The Movie Channel*. One-third of viewers judged the four excellent or very good, half as many as commended the top channels. About half our readers subscribe to premium, pay-extra channels, and their lack of enthusiasm won't surprise the industry. The growth of such channels has been described as flat lately. Among our readers, more dropped these channels than added them in the past year.

CUBIC ZIRCONIUM, ANYONE?

SHOPPING BY TV

TV viewers like home-shopping channels well enough to have spent \$2.3-billion last year on trinkets ranging from 14-karat gold chains and cubic zirconium jewelry to porcelain figurines, sportswear, and camcorders. Cable operators like the extra money the channels bring in—typically, a 5 percent cut of sales from their area.

The two main rivals in this arena are *HSN*, or *The Home Shopping Network*, which runs the "Home Shopping Club" on both regular and cable TV; and *QVC*, a cable network whose initials stand for "quality, value, and convenience."

Both *HSN* and *QVC* feature personable hosts who push the merchandise, take viewer testimonials on the air, and coax everyone to buy and buy. Celebrity guests spice up the action from time to time—Vanna White and Connie Stevens have been on *HSN*, Joan Rivers and Carol Channing on *QVC*. Callers can also play games and

spin wheels for bonus shopping cash.

The *HSN* style is the hard-sell. If you want something, you must buy while it's on the air. The pace is frenzied, with hosts sometimes slashing prices moment by moment, auctioneer-style, and a countdown timer on screen to encourage viewers to order with their push-button phone.

The *QVC* style is softer. You can buy anytime. *QVC* sends its customers a printed schedule of when different types of merchandise will be sold and encourages viewers to tape segments if they cannot watch them live.

About one-fourth of **CONSUMER REPORTS** readers have watched a home-shopping channel, according to our survey, and one-third of those—8 percent of our readers overall—had bought something in the year prior to the survey. Their main complaint: the quality of the goods. Nearly one in five said the merchandise had looked better on TV than in person. Other problems: getting through on the phone, out-of-stock merchandise, and items that arrived damaged or broken. Readers had fewer problems with *QVC* than with *HSN*. The bar graphs at left give specifics.

Two things we'd advise for anyone shopping by cable:

■ Pay attention to shipping and handling charges, which can be significant. *QVC* lists them on screen; *HSN* makes you ask.

■ Take those "regular prices" or "list prices" displayed on air with a boulder of salt. The Federal Trade Commission told us it is investigating how the industry arrives at the prices used for comparison. Both shopping channels say they use retail surveys or "traditional" mark-ups when a manufacturer doesn't specifically give a list price. Two years ago, the New York State Attorney General checked on 150 items *HSN* was offering and found that prices had been adequately documented for less than one-third. Under the state's settlement with *HSN*, the channel admitted no wrongdoing but agreed to document more fully the price data it uses.

HOME-SHOPPING PROBLEMS

Reported by readers who bought from channels in past year



CONSUMER REPORTS CABLE SUBSCRIBER SURVEY -- 1990Summary of Results

(at least 4,400 responses per service)

1.	Discovery Channel	77	
2.	PBS Cable News Network	76	(tie)
4.	Disney Channel (pay) CNN Headline News	74	(tie)
6.	ESPN	70	
7.	Arts & Entertainment	69	
8.	Weather Channel American Movie Classics	66	(tie)
10.	Turner Network Television (TNT)	65	
11.	The Learning Channel	64	
12.	Financial News Network	63	
13.	WTBS Family Channel Nickelodeon	62	(tie)
16.	WGN Lifetime Showtime (pay) HBO (pay)	61	(tie)
20.	Cinemax (pay) The Movie Channel (pay) USA Network	60	(tie)
23.	C-SPAN Nick at Night	59	(tie)
25.	Bravo	58	
26.	NBC Nostalgia Channel FNN: Score	57	(tie)

29.	WPIX The Travel Channel WWOR The Nashville Network ABC CNBC	56	(tie)
35.	Fox Network	55	
36.	VH-1	54	
37.	Country Music Television CBS	53	(tie)
39.	Family Guide Network	52	
40.	FamilyNet	51	
41.	ACTS Satellite Network	50	
42.	Movietime	48	
43.	MTV	40	
44.	Black Entertainment Television	38	

Cable Network Prime Time Ratings Among Subscribers and Penetration Trends

	Prime Time AA Rating (Within Subscribing Households)*					Household Penetration (as %s)**				
	85-86	86-87	87-88	88-89	89-90	85-86	86-87	87-88	88-89	89-90
Total Cable	—	—	—	—	—	49	51	56	58	61
Pay Cable	—	—	—	—	—	27	30	31	31	29
HBO	9.2	8.8	8.8	8.4	7.9	20	23	23	23	22
WTBS	2.5	2.5	2.7	2.4	2.2	43	48	52	55	59
A&E Night	0.5	0.5	0.6	0.6	0.7	24	32	39	44	51
BET	—	0.5	0.5	0.5	0.5	—	18	23	27	31
CNN	1.1	1.2	1.0	1.1	1.2	40	47	53	57	61
Discovery	—	1.0	0.8	0.8	0.9	—	26	39	49	56
ESPN	1.5	1.5	1.8	1.8	2.1	43	49	54	58	61
Family Network	0.9	0.9	0.6	0.8	0.8	37	41	47	51	55
FNN	—	—	—	—	0.1	—	—	34	35	38
HLN	0.5	0.4	0.4	0.4	0.4	23	31	37	42	48
Lifetime	0.6	0.6	0.8	1.0	1.0	30	38	45	49	54
MTV	0.7	0.7	0.7	0.8	0.7	34	42	48	52	54
Nick at Night	—	0.7	0.8	0.9	0.9	27	36	42	43	46
The Nashville Network	1.3	1.1	1.2	1.0	1.0	31	40	47	51	53
The Weather Channel	0.3	0.2	0.3	0.2	0.2	25	33	40	44	49
TNT	—	—	—	1.4	1.6	—	—	—	35	53
USA Network	1.4	1.5	1.6	2.1	2.3	38	45	51	54	58
VH-1	—	0.4	0.4	0.3	0.2	16	25	32	36	42

*AA Rating based only on homes that could receive each service.

**Based on season ending penetration.

Source: Nielsen's Cable Activity Report

PTV Exhibit 7-X

**CUMULATIVE DISTANT SUBSCRIBER INCIDENTS
INCLUDED IN 1989 NIELSEN SPECIAL STUDY**

U.S. *INDEPENDENT* TV STATIONS

CY 1989: COMMERCIAL TV STATIONS (independent, non-network) included by
 Nielsen in study for MPAA (list: P.S.Exhibit ARC-6)--
 ranked by AVERAGE NUMBER OF SUBSCRIBERS, column f [= (d+e)/2].
 Source of data: Thomas Larson/Cable Data Corp. printouts of 11 & 12-Aug-1991.

PBS
 12-SEP-1991

a.	b.	c.	d.	e.	f.	g.	h.
---	---	---	---	---	---	---	---
R	T	CALL	1989-1	1989-2	C.Y.1989:		
A	Y	SIGN	distant	distant	AVG.#OF DIST	= %	CUMULATIVE
N	P	OF	full-time	full-time	-ANT FORM 3	(f divided	PERCENT-
K	E	STATION	form 3	form 3	FULL-TIME	by sum of	AGE OF
			subscribers	subscribers	SUBSCRIBERS	all f)	TOTAL
---	---	-----	-----	-----	-----	-----	-----
1	I	WTBS	36,439,159	37,544,139	36,991,649.0	38.22%	38.22%
2	I	WGN	17,025,812	17,739,098	17,382,455.0	17.96%	56.18%
3	I	WWOR	12,704,202	13,063,774	12,883,988.0	13.31%	69.50%
4	I	WPIX	4,398,398	4,437,284	4,417,841.0	4.56%	74.06%
5	I	WSBK	2,685,567	2,692,056	2,688,811.5	2.78%	76.84%
6	I	KTLA	1,198,812	1,205,195	1,202,003.5	1.24%	78.08%
7	I	WTFX	1,091,437	1,105,215	1,098,326.0	1.13%	79.22%
8	I	KTTV	1,053,880	1,052,421	1,053,150.5	1.09%	80.31%
9	I	KTXL	1,026,326	981,576	1,003,951.0	1.04%	81.34%
10	I	KTVU	729,460	751,928	740,694.0	0.77%	82.11%
11	I	KTVT	733,024	729,517	731,270.5	0.76%	82.86%
12	I	WTTG	709,826	646,854	678,340.0	0.70%	83.57%
13	I	WNYW	633,447	639,835	636,641.0	0.66%	84.22%
14	I	WBFF	597,820	611,872	604,846.0	0.62%	84.85%
15	I	WPHL	596,735	589,013	592,874.0	0.61%	85.46%
16	I	WUAB	543,547	553,008	548,277.5	0.57%	86.03%
17	I	WKBD	535,432	550,825	543,128.5	0.56%	86.59%
18	I	WDCA	530,548	545,658	538,103.0	0.56%	87.15%
19	I	KVOS	434,312	477,730	456,021.0	0.47%	87.62%
20	I	WLVI	431,584	447,608	439,596.0	0.45%	88.07%
21	I	KBHK	422,646	429,020	425,833.0	0.44%	88.51%
22	I	KICU	342,772	354,253	348,512.5	0.36%	88.87%
23	I	WFLD	293,105	313,115	303,110.0	0.31%	89.18%
24	I	WXIX	266,161	274,328	270,244.5	0.28%	89.46%
25	I	KCAL	258,115	267,403	262,759.0	0.27%	89.73%
26	I	KSTW	242,789	245,935	244,362.0	0.25%	89.99%
27	I	KXTX	233,123	245,039	239,081.0	0.25%	90.23%
28	I	KWGN	240,369	233,340	236,854.5	0.24%	90.48%
29	I	WGNX	210,889	217,515	214,202.0	0.22%	90.70%

CY 1989: COMMERCIAL TV STATIONS (independent, non-network) included by
 Nielsen in study for MPAA (list: P.S.Exhibit ARC-6)--
 ranked by AVERAGE NUMBER OF SUBSCRIBERS, column f [= (d+e)/2].
 Source of data: Thomas Larson/Cable Data Corp. printouts of 11 & 12-Aug-1991.

PBS
 12-SEP-1991

a.	b.	c.	d.	e.	f.	g.	h.
---	---	---	---	---	---	---	---
			1989-1	1989-2	C.Y.1989:		
R	T	CALL	distant	distant	AVG.#OF DIST	= %	CUMULATIVE
A	Y	SIGN	full-time	full-time	-ANT FORM 3	(f divided	PERCENT-
N	P	OF	form 3	form 3	FULL-TIME	by sum of	AGE OF
K	E	STATION	subscribers	subscribers	SUBSCRIBERS	all f)	TOTAL
---	---	---	---	---	---	---	---
30	I	WPGH	213,293	214,450	213,871.5	0.22%	90.92%
31	I	WTTV	276,189	142,160	209,174.5	0.22%	91.14%
32	I	WNJU	216,791	198,808	207,799.5	0.21%	91.35%
33	I	WFXJ	205,656	209,252	207,454.0	0.21%	91.57%
34	I	KSHB	198,090	209,347	203,718.5	0.21%	91.78%
35	I	KCOP	203,792	191,224	197,508.0	0.20%	91.98%
36	I	KFCB	192,323	198,515	195,419.0	0.20%	92.18%
37	I	KPTV	195,171	181,672	188,421.5	0.19%	92.38%
38	I	WCFC	158,947	199,448	179,197.5	0.19%	92.56%
39	I	KTSF	178,813	172,849	175,831.0	0.18%	92.74%
40	I	WTXX	183,285	161,437	172,361.0	0.18%	92.92%
41	I	WGBS	164,430	172,735	168,582.5	0.17%	93.10%
42	I	KMSP	187,933	135,965	161,949.0	0.17%	93.26%
43	I	KDOC	143,899	145,855	144,877.0	0.15%	93.41%
44	I	KOFY	137,498	129,104	133,301.0	0.14%	93.55%
45	I	KMEX	125,366	128,438	126,902.0	0.13%	93.68%
46	I	KTXH	129,004	110,174	119,589.0	0.12%	93.81%
47	I	WCCB	113,601	123,001	118,301.0	0.12%	93.93%
48	I	WGNO	122,022	105,328	113,675.0	0.12%	94.05%
49	I	WTOG	104,725	121,685	113,205.0	0.12%	94.16%
50	I	WPTT	105,573	90,837	98,205.0	0.10%	94.26%
51	I	WXTV	87,269	90,397	88,833.0	0.09%	94.36%
52	I	KRIV	58,153	40,367	49,260.0	0.05%	94.41%
53	I	WSVN	0	0	0.0	0.00%	94.41%
all other I's			5,369,377	5,455,735	5,412,556.0	5.59%	100.00%
TOTAL DISTANT FORM			95,680,497	97,873,337	96,776,917.0	100.00%	

3 full-time subscribers,
 commercial independent stations
 (U.S. stations only)

PTV Exhibit 8-X

**CUMULATIVE DISTANT SUBSCRIBER INCIDENTS
INCLUDED IN 1989 NIELSEN SPECIAL STUDY**

U.S. *PUBLIC* TV STATIONS

CY 1989: PUBLIC TV STATIONS included by Nielsen

in study for MPAA (list: P.S. Exhibit ARC-6) --

ranked by AVERAGE NUMBER OF SUBSCRIBERS, column f [= (d+e)/2].

SOurce of subscribers data: Thomas Larson/Cable Data Corporation

AJAX and SSF# reports dated 11 & 12-Aug-1991.

PBS

21-AUG-1991

a.	b.	c.	d.	e.	f.	g.	h.	i.
---	---	---	---	---	---	---	---	---
R	S		CY 1989-1:	CY 1989-2:	C.Y.1989:			Q
A	T	CALL	TOTAL #	TOTAL #	AVG.TOTAL #	= %	CUMULATIVE	U
N	A	SIGN	OF DISTANT	OF DISTANT	OF DISTANT	(f divided	PERCENT-	A
K	T	OF	FULL-TIME	FULL-TIME	FULL-TIME	by sum of	AGE OF	R
	E	STATION	SUBSCRIBERS	SUBSCRIBERS	SUBSCRIBERS	all f)	TOTAL	FILE
---	---	---	---	---	---	---	---	---
1	PA	WVIA	620,909	631,655	626,282.0	8.470%	8.47%	1*
2	IL	WTTW	550,560	561,091	555,825.5	7.517%	15.99%	1*
3	CA	KCET	356,119	371,436	363,777.5	4.920%	20.91%	1*
4	NY/NJ	WNET	289,794	297,925	293,859.5	3.974%	24.88%	1*
5	WI	WHA	312,732	273,082	292,907.0	3.961%	28.84%	2*
6	TX	KERA	243,376	250,548	246,962.0	3.340%	32.18%	2*
7	MI	WTVS	234,320	248,487	241,403.5	3.265%	35.45%	2*
8	MA	WGBH	234,741	227,987	231,364.0	3.129%	38.58%	2*
9	CA	KQED	179,524	192,219	185,871.5	2.514%	41.09%	2*
10	DC	WHMM	179,645	190,744	185,194.5	2.505%	43.59%	2*
11	FL	WPBT	162,079	191,703	176,891.0	2.392%	45.99%	2*
12	MS	WMAV	154,125	155,807	154,966.0	2.096%	48.08%	3*
13	LA	WLPB	185,311	90,811	138,061.0	1.867%	49.95%	3*
14	CO	KRMA	127,911	130,731	129,321.0	1.749%	51.70%	3*
15	TX	KUHT	127,827	125,022	126,424.5	1.710%	53.41%	3*
16	NY	WNYE	116,898	122,325	119,611.5	1.618%	55.03%	3*
17	NJ	WNJS	112,684	116,734	114,709.0	1.551%	56.58%	3*
18	UT	KUED	113,328	115,250	114,289.0	1.546%	58.12%	3*
19	OH	WOSU	93,500	129,975	111,737.5	1.511%	59.64%	3*
20	NH	WENH	98,442	101,703	100,072.5	1.353%	60.99%	3*
		all other PTV's	2,898,921	2,870,170	2,884,545.5	39.012%	100.00%	
		TOTAL FULL-TIME	7,392,746	7,395,405	7,394,075.5	100.000%		
		DISTANT FORM 3						
		SUBSCRIBERS TO						
		PTV STATIONS, CY89						

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Fourth Edition

STATISTICS FOR MANAGEMENT

Richard I. Levin

The University of North Carolina, Chapel Hill

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7-1 INTRODUCTION TO SAMPLING

Reasons for sampling

Shoppers often sample a small piece of cheese before purchasing any. They decide from one piece what the larger chunk will taste like. A chemist does the same thing when he takes a sample of whiskey from a vat, determines that it is 90 proof, and infers that all whiskey in the vat is 90 proof. If the chemist tests all the whiskey or the shoppers taste all the cheese, there will be none to sell. Testing all of the product often destroys it and is unnecessary. To determine the characteristics of the whole, we have to sample only a portion.

Suppose that, as the personnel director of a large bank, you need to write a report describing all the employees who have voluntarily left the company in the last ten years. You would have a difficult task locating all these thousands of people. They are not easily accessible as a group—many have died, moved from the community, left the country, or acquired a new name by marriage. How do you write the report? The best idea is to locate a representative sample and interview them, in order to generalize about the entire group.

Time is also a factor when managers need information quickly in order to adjust an operation or change a policy. Take an automatic machine that sorts thousands of pieces of mail daily. Why wait for an entire day's output to check whether the machine is working accurately (whether the *population characteristics* are those required by the postal service)? Instead, samples can be taken at specific intervals, and if necessary, the machine can be adjusted right away.

Census or sample

Sometimes it is possible and practical to examine every person or item in the population we wish to describe. We call this a *complete enumeration*, or *census*. We use sampling when it is not possible to count or measure every item in the population.

Examples of populations and samples

Statisticians use the word *population* to refer not only to people but to all items that have been chosen for study. In the cases we have just mentioned, the populations are all the cheese in the chunk, all the whiskey in the vat, all the employees of the large bank who voluntarily left in the last ten years, and all mail sorted by the automatic machine since the previous sample check. Statisticians use the word *sample* to describe a portion chosen from the population.

Statistics and Parameters

Function of statistics and parameters

Mathematically, we can describe samples and populations by using measures such as the mean, median, mode, and standard deviation, which we introduced in Chapters 3 and 4. When these terms describe the characteristics of a sample, they are called *statistics*. When they describe the characteristics of a population, they are called *parameters*. A *statistic* is a characteristic of a sample, and a *parameter* is a characteristic of a population.

Suppose that the mean height in inches of all tenth graders in the

Using statistics to
estimate parameters

N , μ , σ , and n , \bar{x} , s :
standard symbols

United States is 60 inches. In this case, 60 inches is a characteristic of the population "all tenth graders" and can be called a *population parameter*. On the other hand, if we say that the mean height in Ms. Jones's tenth-grade class in Bennettsville is 60 inches, we are using 60 inches to describe a characteristic of the sample "Ms. Jones's tenth graders." In that case, 60 inches would be a *sample statistic*. If we are convinced that the mean height of Ms. Jones's tenth graders is an accurate estimate of the mean height of all tenth graders in the United States, we could use the sample statistic "mean height of Ms. Jones's tenth graders" to estimate the population parameter "mean height of all U.S. tenth-graders" without having to count all the millions of tenth graders in the United States.

To be consistent, statisticians use lower case Roman letters to denote sample statistics and Greek or capital letters for population parameters. Table 7-1 lists these symbols and summarizes the definitions we have studied so far in this chapter.

TABLE 7-1 Differences between populations and samples

	POPULATION	SAMPLE
Definition	Collection of items being considered	Part or portion of the population chosen for study
Characteristics	"Parameters"	"Statistics"
Symbols	Population size = N	Sample size = n
	Population mean = μ	Sample mean = \bar{x}
	Population standard deviation = σ	Sample standard deviation = s

Types of Sampling

Judgment and
probability sampling

There are two methods of selecting samples from populations: *nonrandom* or *judgment* sampling, and *random* or *probability* sampling. In probability sampling, all the items in the population have a chance of being chosen in the sample. In judgment sampling, personal knowledge and opinion are used to identify those items from the population that are to be included in the sample. A sample selected by judgment sampling is based on someone's expertise about the population. A forest ranger, for example, would have a judgment sample if he decided ahead of time which parts of a large forested area he would walk through to estimate the total board feet of lumber that could be cut. Sometimes a judgment sample is used as a pilot or trial sample to decide how to take a random sample later. Judgment samples avoid the statistical analysis that is necessary to make probability samples. They are more convenient and can be used successfully even though we are unable to measure their validity. But if a study uses judgment sampling and loses a significant degree of "representativeness," it will have purchased convenience at too high a price.

engine condition, and three measures of battery-cable condition, it would take $2 \times 5 \times 4 \times 3 = 120$ tests for a complete factorial experiment.

Fortunately, statisticians have been able to help us reduce the number of tests in cases like this. To illustrate how this works, look at the consumer-products company that wants to test market a new toothpaste in four different cities with four different kinds of packages and with four different advertising programs. In such a case, a complete factorial experiment would take $4 \times 4 \times 4 = 64$ tests. However, if we do some clever planning, we can actually do it with far fewer tests — sixteen, to be precise.

Let's use the notation:

A = City 1	I = Package 1	1 = Ad program 1
B = City 2	II = Package 2	2 = Ad program 2
C = City 3	III = Package 3	3 = Ad program 3
D = City 4	IV = Package 4	4 = Ad program 4

Now we arrange the cities, packages, and advertising programs in a design called a Latin square (Fig. 7-8).

		Advertising program			
		1	2	3	4
Packages	I	C	B	D	A
	II	B	C	A	D
	III	D	A	B	C
	IV	A	D	C	B

FIGURE 7-8
A Latin square

The statistical analysis

In the experimental design represented by the Latin square, we would need only sixteen tests instead of 64 as originally calculated. Each combination of city, package, and advertising program would be represented in the sixteen tests. The actual statistical analysis of the data obtained from such a Latin square experimental design would require a form of analysis of variance a bit beyond the scope of this book.

7-7 TERMS INTRODUCED IN CHAPTER 7

CENSUS The measurement or examination of every element in the population.

CENTRAL LIMIT THEOREM A rule assuring that the sampling distribution of

the mean approaches normal as the sample size increases, regardless of the shape of the population distribution from which the sample is selected.

CLUSTERS Within a population, groups that are essentially similar to each other, although the groups themselves have wide internal variation.

CLUSTER SAMPLING A method of random sampling in which the population is divided into groups, or clusters of elements, and then a random sample of these clusters is selected.

FACTORIAL EXPERIMENT Experiment in which each factor involved is used once with each other factor. In a complete factorial experiment, every level of each factor is used once with each level of every other factor.

FINITE POPULATION A population having a stated or limited size.

FINITE POPULATION MULTIPLIER A factor used to correct the standard error of the mean for studying a population of finite size that is small in relation to the size of the sample.

INFINITE POPULATION A population in which it is theoretically impossible to observe all the elements.

JUDGMENT SAMPLING A method of selecting a sample from a population in which personal knowledge or expertise is used to identify those items from the population that are to be included in the sample.

LATIN SQUARE An efficient experimental design that makes it unnecessary to use a complete factorial experiment.

PARAMETERS Values that describe the characteristics of a population.

PRECISION The degree of accuracy with which the sample mean can estimate the population mean, as revealed by the standard error of the mean.

RANDOM OR PROBABILITY SAMPLING A method of selecting a sample from a population in which all the items in the population have an equal chance of being chosen in the sample.

SAMPLE A portion of the elements in a population chosen for direct examination or measurement.

SAMPLING DISTRIBUTION OF A STATISTIC For a given population, a probability distribution of all the possible values a statistic may take on for a given sample size.

SAMPLING DISTRIBUTION OF THE MEAN A probability distribution of all the possible means of samples of a given size, n , from a population.

SAMPLING ERROR Error or variation among sample statistics due to chance; i.e., differences between each sample and the population, and among several samples, which are due solely to the elements we happened to choose for the sample.

SAMPLING FRACTION The fraction or proportion of the population contained in a sample.

SIMPLE RANDOM SAMPLING

Methods of selecting samples that allow each possible sample an equal probability of being picked and each item in the entire population an equal chance of being included in the sample.

STANDARD ERROR The standard deviation of the sampling distribution of a statistic.

STANDARD ERROR OF THE MEAN The standard deviation of the sampling distribution of the mean; a measure of the extent to which we expect the means from different samples to vary from the population mean, owing to the chance error in the sampling process.

STATISTICAL INFERENCE The process of making inferences about populations from information contained in samples.

STATISTICS Measures describing the characteristics of a sample.

STRATA Groups within a population formed in such a way that each group is

relatively homogeneous, but wider variability exists among the separate groups.

STRATIFIED SAMPLING A method of random sampling in which the population is divided into homogeneous groups, or strata, and elements within each stratum are selected at random according to one of two rules: (1) A specified number of elements is drawn from each stratum corresponding to the proportion of that stratum in the population, or (2) an equal number

of elements is drawn from each stratum, and the results are weighted according to the stratum's proportion of the total population.

SYSTEMATIC SAMPLING A method of random sampling used in statistics in which elements to be sampled are selected from the population at a uniform interval that is measured in time, order, or space.

7-8 EQUATIONS INTRODUCED IN CHAPTER 7

[7-1]

$$\sigma_{\bar{x}} = \frac{\sigma}{\sqrt{n}}$$

p. 291

Use this formula to derive the *standard error of the mean* when the population is *infinite*; that is, when the elements of the population cannot be enumerated in a reasonable period of time or when we sample with replacement. This equation explains that the sampling distribution has a standard deviation, which we also call a standard error, equal to the population standard deviation divided by the square root of the sample size.

[7-2]

$$z = \frac{\bar{x} - \mu}{\sigma_{\bar{x}}}$$

p. 291

A modified version of Equation 6-6, this formula allows us to determine the distance of the *sample mean* \bar{x} from the population mean μ when we divide the difference by the standard error of the mean $\sigma_{\bar{x}}$. Once we have derived a z value, we can use the Standard Normal Probability Distribution Table and compute the probability that the sample mean will be that distance from the population mean. Because of the central limit theorem, we can use this formula for non-normal distributions if the sample size is at least 30.

[7-3]

$$\sigma_{\bar{x}} = \frac{\sigma}{\sqrt{n}} \times \sqrt{\frac{N-n}{N-1}}$$

p. 292

where:

N = size of the population

n = size of the sample

This is the formula for finding the *standard error of the mean* when the population is *finite*; that is, of stated or limited size.

California—San Bernardino-Los Angeles

KSCI

Ch. 18

Network Service: None, independent.

Licensee: KSCI Inc., 12401 W. Olympic Blvd., Los Angeles, CA 90064.

Studio: 12401 W. Olympic Blvd., Los Angeles, CA 90064.

Telephone: 213-478-1818. **Fax:** 213-479-8118.

Technical Facilities: Channel No. 18 (494-500 MHz). Authorized power: 347-kw visual, 34.7-kw aural. Antenna: 2380-ft. above av. terrain, 144-ft. above ground, 5573-ft. above sea level.

Latitude	34°	11'	15.00"
Longitude	117°	41'	53.50"

Transmitter: Sunset Ridge, 5-mi. NE of Claremont.

Satellite Earth Stations: Paracclipse, 3.8-meter C-band; Miralite, 3.7-meter C-band; Scientific-Atlanta, 4.5-meter Ku-band; Standard Communications receivers.

News Service: INDX.

Ownership: Intercontinental Television Group Inc. (Group Owner).

Began Operation: June 30, 1977. Sale to present owner by World Plan Executive Council approved by FCC Dec. 19, 1986 (*Television Digest*, Vol. 26:45).

Represented (sales): Asian Television Sales.

Represented (legal): Leventhal, Senter & Lerman.

Personnel:

RAY BEINDORF, president.

ROSEMARY DANON, general manager.

DOROTHY MARSH, station manager.

KAREN GARCES, sales manager.

RICHARD MILLET, operations manager.

JOHN A. KOJIMA, director of finance.

MARIA RUIZ, traffic manager.

BILL WELTY, director of engineering.

JOSEPH JINN, Chinese news director.

MARY GOOD, promotions.



AL FOOTNICK, production manager.
MARTIE QUAN, media relations manager.

Highest 30 Sec. Rate: \$300.

Arbitron Data: Not available.

City of License: San Bernardino. **ADI:** Los Angeles. **Rank:** 2.

LPTV, Spanish Language TV, Experimental TV, U.S. TV Calls

Utah

Cedar City. K22AH, ch. 22. Russell Communications. 137 W. Chapman Ave., Fullerton, Calif. 92635.

Cedar City. K60BY, ch. 60. Summit Communications Inc. J. Hirshfield. 63 Skagit Key, Bellevue, Wash. 98006.

Delta. K64BO, ch. 64. KUTV Inc. 2185 S. 3600 West, Salt Lake City, Utah. 84119.

Green River. K30AG, ch. 30. Green River City TV. Box 356, Green River, Utah. 84525.

Kanab. K12ND, ch. 12. Kanab Lions Club. 156 E. 100 St., Kanab, Utah. 84741.

Manti-Ephraim. K28AG, ch. 28. Sanpete Television Corp. 53882 South 850 West, Bountiful, Utah. 84010.

Marysville. K32AL, ch. 32. Univ. of Utah. 205 James Tarnage Bldg., Salt Lake City, Utah. 84112.

Myton. K43AE, ch. 43. KUTV Inc. 2185 S. 3600 West, Salt Lake City, Utah. 84119.

Park City. K45AX, ch. 45. William H. Coleman. 1400 Lucky John, Park City, Utah. 84060.

St. George. K14AN, ch. 14. Russell Communications. 137 W. Chapman Ave., Fullerton, Calif. 92635.

St. George. K27AH, ch. 27. Summit Communications Inc. 63 Skagit Key, Bellevue, Wash. 98006.

St. George. K55DL, ch. 55. Julie P. Miner. 1702 N.W. Crescent, Grants Pass, Ore. 97526.

Virginia

Town Concord. W33AD, ch. 33. Paul H. Passink. Rt. 2, Box 70, Concord, Va. 24538.

Woodstock. W10AZ, ch. 10. Ruarch Associates. 352C Fort Valley Route, St. Davids Church, Va. 22652.

Washington

Colville. K09UP, ch. 9. Statesman-Examiner Inc. 220 So. Main St., Colville, Wa. 99114.

Ellensburg. K35BJ, ch. 35. Okanogan Television Inc. 618 Okoma Dr., Omak, Wa. 98841.

Omak-Okanogan. K31AH, ch. 31. Statesman-Examiner Inc. 25 S. Ash, Box 945, Omak, Wa. 98841.

Wenatchee. K30AJ, ch. 30. Spokane Television. 960 Valley Mall Pkwy., East Wenatchee, Wa. 98801.

Wenatchee. K14BF, ch. 14. Westcoast Broadcasting Inc. Box 159, Wenatchee, Wa. 98801.

Wisconsin

Ladysmith. W06AS, ch. 6. Bell Press Inc. 120 W. 3rd St., Ladysmith, Wis. 54848.

Land O'Lakes. W16AC, ch. 16. Land of Lakes Superstation Inc. c/o Violet Baker, Land of Lakes, Wis. 54540.

Milwaukee. W08BY, ch. 8. Charles Woods. 150 Island Dr., Key Biscayne, Fla. 33149.

Rice Lake. W15AB, ch. 15. Chronotype Publishing Co. 28 S. Main St., Rice Lake, Wis. 54818.

Ripon. W42AF, ch. 42. STV of Oshkosh Inc. Box 597, Adams, Wis. 53910.

Wyoming

Casper. K13UC, ch. 13. Manna Media Corp. 111 East Second, Casper, Wyo. 82601.

Cheyenne. K11RP, ch. 11. Russell Communications. 137 W. Chapman Ave., Fullerton, Calif. 92635.

Cheyenne. K49AY, ch. 49. Echonet Corp. 2250 S. Raritan, Englewood, Colo. 80110.

Douglas. K07RO, ch. 7. Sky-Window TV Inc. 10th & Richards, Box 4, Douglas, Wyo. 82633.

Gillette. K16AE, ch. 16. C-Tel Inc. Box 30635, Billings, Mont. 59107.

Gillette. K22AD, ch. 22. Summit Communications Inc. 63 Skagit Key, Bellevue, Wash. 98006.

Jackson. K48BM, ch. 48. Ambassador Media Corp. 7600 Potomac Fall Rd., McLean, Va. 22102.

Riverton. K08GO, ch. 8. Riverton Freemont TV Club Inc. 133 S. Second East, Box 628, Riverton, Wyo. 82501.

Shoshoni-Thermopolis. K40AQ, ch. 40. Riverton Freemont TV Club Inc. 133 S. 2nd E., Box 628, Riverton, Wyo. 82501.

West Riverton. K44AW, ch. 44. Riverton Freemont TV Club Inc. 133 S. Second East, Box 628, Riverton, Wyo. 82501.

Guam

Tamuning. K14AM, ch. 14. Guahan Airwaves Corp. Box 24816, Guam. 96921.

Spanish-language TV Stations

The following Spanish-language television stations operate within the United States or near the U.S. border. Readers should refer to the first part of section C for further information on the stations listed below.

Arizona

Phoenix—KTUV-TV Phoenix (ch 33).

California

Corona—KVEA-TV Corona (ch 52).

El Centro—XHBC-TV Mexicali, Mexico (ch 3).

Fresno—KFTV-TV Hanford (ch 21).

Los Angeles—KMEF-TV Los Angeles (ch 34).

Los Angeles—KSCI-TV San Bernardino (ch 18).

Sacramento—KCSO-TV Modesto (ch 49).

Salinas-Monterey—KSMS-TV Monterey (ch 67).

San Diego—XEWT-TV Tijuana, Mexico (ch 12).

San Francisco—KDTV-TV San Francisco (ch 14).

San Francisco—KSTS-TV San Jose (ch 48).

Florida

Fort Lauderdale—WSCV-TV Fort Lauderdale (ch 51).

Miami—WLTU-TV Miami (ch 23).

Illinois

Chicago—WBBS-TV West Chicago (ch 60).

Chicago—WCIU-TV Chicago (ch 26).
Chicago—WSNS-TV Chicago (ch 44).

Nevada

Reno—KREN-TV Reno (ch 27).

New Mexico

Albuquerque—KLUZ-TV Albuquerque (ch 41).

New York

New York—WNUJ-TV Linden, N.J. (ch 47).

New York—WXTV-TV Paterson, N.J. (ch 41).

Texas

Corpus Christi—KORO-TV Corpus Christi (ch 26).
El Paso—KINT-TV El Paso (ch 26).

El Paso—XEJ-TV Juarez, Mexico (ch 5).

El Paso—XEPM-TV Juarez, Mexico (ch 2).

El Paso—XHIJ-TV Juarez, Mexico (ch 44).

Houston—KXLN-TV Rosenberg (ch 45).

Laredo—XEFE-TV Nuevo Laredo, Mexico (ch 2).

San Antonio—KWEX-TV San Antonio (ch 41).

Puerto Rico

Fajardo—WMTJ-TV Fajardo (ch 40).

Mayaguez—WNUX-TV Mayaguez (ch 22).

Mayaguez—WOLE-TV Aguadilla (ch 12).

Mayaguez—WORA-TV Mayaguez (ch 5).

Mayaguez—WVEO-TV Aguadilla (ch 44).

Ponce—WQTO-TV Ponce (ch 26).

Ponce—WSTE-TV Ponce (ch 7).

Ponce—WSUR-TV Ponce (ch 9).

San Juan—WAPA-TV San Juan (ch 4).

San Juan—WIPR-TV San Juan (ch 6).

San Juan—WKAQ-TV San Juan (ch 2).

San Juan—WLIJ-TV Caguas (ch 11).

Experimental TV Stations

The following is a list of the experimental television stations authorized by the FCC as of January 1988.

Channel 7 Inc.—WSTE-TV Ponce, P.R. operates an experimental TV station on ch 7 using 5.01 kw vis. 100 kw visual and 316 kw visual and utilizing the transmitter locations in Puerto Rico.

Dielectric Communications Antennas—KA2XZ, Cherry Hill twp., N.J. Chs 2 to 69, 54-88 mhz and 174-806 mhz, authorized to use up to 100 kw vis. in the lower-VHF band, 316 kw visual in the upper-VHF band, and 5,000 kw on UHF channels up to ch 69.

King Broadcasting Co.—KHNL-TV Honolulu (ch 1) operates an experimental TV station with a co-channel TV transmitter.

National Association of Broadcasters—Experiment TV broadcast station in Washington on channels 6 and 59; 1.5 kw vis. Ant 375 ft. The station, licensed temporarily as WWHD-TV, broadcasts transmission of advanced television systems. Executives: E.O. Fritts, pres; John Abel, exec VP; Thomas B. Kelle, senior VP, science & technology; E. Benjamin Crutcher, field, project dir.

Translator Sales & Service (Bob Bradford)—KB2XPD Various locations in Washington, Oregon, Idaho and Montana. Ch 3, 60-66 mhz, 1 w; ch 69, 800-806 mhz, 20 w. To set up a temporary VHF and/or UHF translator at a site proposed for a permanent translator installation.

U.S. Television Stations by Call Letters

CBET Windsor ON
KAAL Austin MN
KAAS-TV Salina KS
KABB San Antonio TX
KABC-TV Los Angeles CA
KABY-TV Aberdeen SD
KACB-TV San Angelo TX
*KACV-TV Amarillo TX
KADN Lafayette LA
*KAET Phoenix AZ
*KAFT Fayetteville AR
KAGL San Bernardino CA
*KAID Boise ID
KAH-TV Wailuku HI
KAIL Fresno CA
KAIT-TV Jonesboro AR
KAKE-TV Wichita KS
*KAKM Anchorage AK
KALB-TV Alexandria LA
KAMC Lubbock TX
KAME-TV Reno NV
KAMR-TV Amarillo TX
*KAMU-TV College Station TX

KAPP Yakima WA
KARD West Monroe LA
KARE Minneapolis MN
KARK-TV Little Rock AR
KASK-TV Las Cruces NM
KATC Lafayette LA
KATN Fairbanks AK
KATU Portland OR
KATV Little Rock AR
KAUT Oklahoma City OK
KAUZ-TV Wichita Falls TX
KAVU-TV Victoria TX
*KAWB Brainerd MN
*KAWM Bemidji MN
KAYS-TV Hays KS
KAYU-TV Spokane WA
*KAZQ Albuquerque NM

KBAK-TV Bakersfield CA
KBBL Big Bear Lake CA
KBCI-TV Boise ID
KBCP Paradise CA
*KBDI-TV Broomfield CO

KBFD Honolulu HI
*KBHE-TV Rapid City SD
KBHK-TV San Francisco CA
KBIM-TV Roswell NM
*KBIN Council Bluffs IA
KBJR-TV Superior, Wis. WI
KBLO-TV Rapid City SD
*KBME Bismarck ND
KBMT Beaumont TX
KBMY Bismarck ND
KBRR Thief River Falls MN
KBSI Cape Girardeau MO
KBTV Des Moines IA
KBTV-TV Bryan TX
KBVO Austin TX
*KBYU-TV Provo UT

*KCAH Watsonville CA
KCAN Albion NE
KCAU-TV Sioux City IA
KCCA Salinas CA
KCBQ-TV Lubbock TX
KCBS-TV Los Angeles CA

KCBY-TV Coos Bay OR
KCCI-TV Des Moines IA
KCCO-TV Alexandria MN
KCCW-TV Walker MN
KCCZ Cedar City UT
KCCN-TV Temple TX
KCEO-TV Oroville CA
*KCET Los Angeles CA
KCFW-TV Kalispell MT
KCHF Santa Fe NM
KCIK El Paso TX
KCIT Amarillo TX
KCJA Santa Fe NM
*KCKA Centralia WA
KCKU Tyler TX
KCMH El Dorado AR
KCMY Sacramento CA
KCNK-TV Denver CO
KCOP Los Angeles CA
*KCOS El Paso TX
KCOY-TV Santa Maria CA
KCPM Chico CA
KCPQ Tacoma WA

*KCPT Kansas City MO
KCRA-TV Sacramento CA
KCRG-TV Cedar Rapids IA
KCRL Reno NV
*KCSM-TV San Mateo CA
KCSO Modesto CA
KCSF-TV San Diego CA
KCTD Butte MT
*KCTS-TV Seattle WA
KCTV Kansas City MO
KCTZ Bozeman MT
KCVT Shawnee OK
*KCWC-TV Lander WY
KCWT Wenatchee WA

KDAF Dallas TX
KDAV Davenport IA
KDBC-TV El Paso TX
KDEB-TV Springfield MO
KDFI-TV Dallas TX
KDFW-TV Dallas TX
*KDIN-TV Des Moines IA
KDKA-TV Pittsburgh PA

Illinois—Chicago

WCIU-TV

Ch. 26

Network Service: Univision.

Licensee: Weigel Broadcasting Co., Board of Trade Bldg., 141 W. Jackson Blvd., Chicago, IL 60604.

Studio: 141 W. Jackson Blvd., Chicago, IL 60604.

Telephone: 312-663-0260. **Telex:** 270-255. **Fax:** 312-663-0585.

Technical Facilities: Channel No. 26 (542-548 MHz). Authorized power: 2000-kw max. visual, 200-kw max. aural. Antenna: 1555-ft. above av. terrain, 1707-ft. above ground, 2302-ft. above sea level.

Latitude 41° 52' 44"
Longitude 87° 38' 10"

Transmitter: Sears Bldg., 233 S. Wacker Dr., Chicago.

Satellite Earth Stations: 4 in operation.

News Services: City Hall News, Reuters, UPI.

Ownership: Weigel Broadcasting Co. (Group Owner).

Began Operation: February 6, 1964.

Represented (sales): Univision.

Represented (legal): Cohn & Marks.

Represented (engineering): David Steel & Associates Inc.

Personnel:

HOWARD SHAPIRO, president.

PETER ZOMAYA, assistant general manager & sales manager.

MARY HOUSER, film director.

BERNARD HOELTING, chief engineer.

DON AQUIRRE, news director.

NORMAN SHAPIRO, business & legal advisor.

Highest 30 Sec. Rate: \$525.

City of License: Chicago. **ADI:** Chicago. **Rank:** 3.

Total Households: ©MSI Consumer Market Data as of 1/1/90. TV Homes, TV% and Circulation ©1990 Arbitron. County coverage based on Arbitron study.

PTV EXHIBIT 12-X



Net Weekly Circulation	State County	Total Households	TV Households	%
Between 5-24%	ILLINOIS			
	Cook	1,969,600	1,941,300	99
	INDIANA			
	Lake	174,400	172,300	99
	Newton	5,200	5,100	98
Totals		2,149,200	2,118,700	99
Net Weekly Circulation (1990)			192,900	
Average Daily Circulation (1990)			67,300	

Texas—Galveston-Houston

KTMD**Ch. 48****Network Service:** Telemundo.**Licensee:** Telemundo Group Inc., 1740 Broadway, 18th Floor, New York, NY 10019.**Studio:** 3903 Stoney Brook, Houston, TX 77063.**Telephone:** 713-974-4848. **Fax:** 713-974-5875.**Technical Facilities:** Channel No. 48 (674-680 MHz). Authorized power: 4198-kw max. & 1062-kw horizontal visual, 323-kw max. & 212-kw horizontal aural. Antenna: 1176-ft. above av. terrain, 1199-ft. above ground, 1212-ft. above sea level.

Latitude	29°	27'	57"
Longitude	95°	13'	23"

Transmitter: Rte. 3, Box 32, Alvin.**Satellite Earth Stations:** Comtech, 5-meter Ku & C-band; Vertex, 6.1-meter C-band; 4 Pinzone receivers.**News Services:** AP, CNN.**Ownership:** Telemundo Group (Group Owner).**Began Operation:** February 1, 1988. Sale to present owner by Raymond G. Schindler, et al., approved by FCC March 9, 1988.**Represented (sales):** Telemundo.**Represented (legal):** Hogan & Hartson.**Represented (engineering):** Hammett & Edison Inc.**Personnel:**

MAURICIO MENDEZ, vice president & general manager.

BECKY DIAZ, general sales manager.

BLANE HUHN, chief engineer.

GUILLERMO RESTREPO, news director.

ANNA CARDONA, program & promotion manager.

P. J. GRIGGS, business manager.



KTMD BPCT-780907KF Granted 3/1/85

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MARCELLO MARINI, governmental & community affairs director.**Highest 30 Sec. Rate:** \$600.**Arbitron Data:** Not available.**City of License:** Galveston. **ADI:** Houston. **Rank:** 10.

100

14244

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**SELECTION OF COMMERCIAL STATIONS TO BE INCLUDED
IN THE 1989 SPECIAL NIELSEN STUDY -- AN ILLUSTRATION**

<u>Station</u>	<u>Type</u>	<u>Number of Distant Form 3 Subscribers</u>	<u>Included in Sample?</u>
KSCI	Independent	103,114	NO
WCIU	Independent	101,484	NO
KTXH	Independent	100,902	YES
WTOG	Independent	93,659	YES
KTMD	Independent	92,906	NO

Source: NAB 1989 Exhibit 38X (June 19, 1990 CDC printout used by Mr. Cooper to select commercial stations)

SELECTED SPECIALTY STATIONS WITH OVER
80,000 FULL TIME DISTANT SUBSCRIBERS
IN 1989-1 OR 1989-2 THAT WERE
NOT INCLUDED IN THE 1989 MPAA SPECIAL STUDY¹

<u>Station</u>	<u>Subscribers</u>
WPCB	299,617
WHFT	157,208
WKOI	101,421
WCLF ²	95,393

¹Source: Cable Data Corporation and NAB 1989 Exhibit 37x

²1989-2 only